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ABSTRACT

The vocational rehabilitation agencies in Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) cooperated in a study to determine whether there were systematic gender differences along input, program, and output dimensions among the state vocational rehabilitation programs in the region over a 13-year period, 1972-1984. The interdependence of gender, as well as fiscal year, on selected state-level indexes of client characteristics, service delivery, and program impact was examined using a study group approach. Data for the study were drawn from the R-300 data files that are submitted annually by each state agency to the Rehabilitation Services Administration. The study found important differences in characteristics, service patterns, and outcomes and impacts of the vocational rehabilitation program as between men and women in the region. The results indicate a serious problem of inequity in the impacts of the vocational rehabilitation program on men and women with disabilities. The research clearly demonstrated that women with disabilities did not acquire financial resources and occupational success at the conclusion of rehabilitation comparable to those achieved by men. The research raised issues regarding outcomes, inputs, processes, and systemic changes, and recommendations were made to address the problems found in these areas. (KC)

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REGION V STUDY OF
ACCESS, SERVICES AND BENEFITS
FROM VOCATIONAL REHABILITATION
1972 TO 1984:
A Gender Perspective

Conducted
by

Region V
Research Study Group

September 1987

In addition to funds provided by the individual state agencies, this project was partially supported through grant funds provided by the NATIONAL INSTITUTE ON DISABILITY AND REHABILITATION RESEARCH to the Research and Training Centers at the University of Wisconsin-Stout and at West Virginia University and through training funds provided by the Rehabilitation Services Administration to the Region V Rehabilitation Continuing Education Program at Southern Illinois University. The contents do not necessarily represent the interpretations or opinions of the Department of Education.

FOREWORD

"Region V Study of Access, Services and Benefits from Vocational Rehabilitation 1972 to 1984: A Gender Perspective" was a three year project. It has demonstrated that the efforts and expertise of regional resources, the University of Wisconsin-Stout Rehabilitation Research and Training Center, the Region V Rehabilitation Continuing Education Program and State Rehabilitation Agencies, can be coordinated to focus on a single research project.

There is a historical trail leading to the development of this joint effort. In 1978, a special interest group was formed by the National Rehabilitation Association to study the apparent under-representation of women in rehabilitation professional and administrative positions, and in State Rehabilitation Agency case files. This group stimulated interest in Region V and the issues of equity in access to rehabilitation services, equity in the delivery of rehabilitation services, and the differences in the impact of these services on men and women were brought to the attention of rehabilitation program evaluators and State Rehabilitation Agency Directors. By 1984, a number of special information gathering initiatives had been implemented by individual state agencies and there was mounting interest among rehabilitation program evaluators in Region V for a study of these issues. In 1984, the idea for a cooperative project among State Rehabilitation Agencies was proposed by program evaluators at their annual meeting. A few months after the 1984 Program Evaluation Conference, the idea was given general support by state agency directors. Specifically, state agency directors gave program evaluators the "go-ahead" to attempt to develop and demonstrate the capacity of Region V State Rehabilitation Agencies and federally supported projects to work together in order to identify, study and develop strategies to resolve problems. A regional perspective was to be tested, that is a perspective that would not distinguish any one program from the others, but that might be used to examine problems of regional importance. The general issue of equity in the delivery of rehabilitation services to men and women was the focus of this experiment.

Consequently, in the summer of 1984, a Region V Task Force was formed and given the task of defining a study that could be developed around the general issue of equity in the delivery of rehabilitation services to men and women. This task force included: Harry Smith and Geraldine Hansen from Michigan; Sue Kidder from Wisconsin; Sue Suter from Illinois; Mary Shortall from Minnesota; Dennis Wysocki from Ohio; Constance Brown from Indiana; George McCrowey and Mariam Walker from the RSA Regional Office; and representatives from the Regional Continuing Education Program and the University of Wisconsin-Stout Research and Training Center. It was during the winter 1985 meeting that the task force came upon the idea of conducting a longitudinal study of equity in the delivery of rehabilitation services to men and women based on R-300 data. This idea was refined and translated into a research model by Fredrick Menz from the Stout Research and Training Center and Geraldine Hansen from the Michigan Rehabilitation Services Agency. At the 1985 Regional Program Evaluation Conference in Columbus, Ohio, this model was presented to program evaluators and the practical aspects of accessing R-300 data at the West Virginia Research and Training Center were explored.

Then program evaluators went home to discuss this model and the possibilities for securing R-300 data from the West Virginia Research and Training Center with their respective State Agency Directors. In addition, state agencies were approached for financial and staff support. Suzanne Lee from Wisconsin and Harry Smith from Michigan assumed responsibility for promoting and moving this rapidly emerging study forward. Over the next year, a number of computer data runs were made by the West Virginia Research and Training Center, additional data types were acquired from state agencies, and missing data were added to existing data files. However, modest progress was made in formulating the study. Subsequently, two very important meetings were held at the RSA Regional Office in Chicago. During these meetings, the research model was solidified and Meg Ford, from Wisconsin, was assigned the responsibility for coordinating this project.

It was at one of the meetings in the Regional Office that the task force became aware of the need for technical assistance from rehabilitation policy development and resource specialists. Therefore, in 1986, policy development specialists were added to the study group. By then, it was clear to task force members that this model could be replicated to study other issues of common interest to state agencies across the Region. So it was that from the humble beginnings of an idea to study a specific issue, equity in the delivery of rehabilitation services to men and women, came a model that identifies processes and procedures for using State Rehabilitation Agency and rehabilitation project resources to conduct regional research and/or program evaluation studies.

I am indeed grateful to the Directors of State Rehabilitation Agencies in Region V, especially Patricia Kallsen, who was during the time of the study State Director of the Wisconsin Rehabilitation Agency, for their leadership during the development and implementation of this study, and for contributing the financial and staff resources needed to complete this project. To the University of Wisconsin-Stout Research and Training Center, to the West Virginia Research and Training Center, to the Regional Rehabilitation Continuing Education Program, and to the state agency program evaluators and policy development specialists who participated in this joint effort, I say thank ycu for a job well done.

Terry D. Conour,
Acting Regional Commissioner
Rehabilitation Services Administration

ACKNOWLEDGEMENTS

This regional research study was truly a "national" effort. The cast of those involved reads like a "directory of involved professionals." Given much more time, the list would probably have eventually included input, involvement, efforts or the reactions from everyone concerned with equity in vocational rehabilitation. As the saying might go, "The legions were many and their measure not small."

As with most collaborations, the idea had to start someplace and with someone. Here, we know that Patricia G. Kallsen, Harry Smith, and the National Rehabilitation Association did much to bring the issue to Region V's attention. The Region V program evaluators aligned themselves to examining the issue from a regional perspective and set in motion a level-of-concern among the General and Blind Vocational Rehabilitation Agencies in Region V for which they worked.

The commitment of Region V's Council of State Administrators of Vocational Rehabilitation was initially demonstrated through financial and personnel support to the effort and later by endorsement of the study recommendations. The lasting commitment was demonstrated by the action they took subsequent to their acceptance of this report on September 15, 1987:

> Region V CSAVR will develop and approve a regional master plan to operationalize the recommendations of the Region V study of gender equity in vocational rehabilitation. The Committee agreed that each state would need to develop a state plan to realize the intents of the study recommendations. The plans of action will include: (a) a method for follow-up and evaluation of the implementation of the recommendations, (b) broadened base of review which includes women with disabilities in development of those plans and in the evaluation, and (c) the evaluation be completed within three years.

George McCrowey, Regional Coordinator for the Rehabilitation Services Administration, provided regional perspective to the study, continuity to the working groups throughout the three years, and objective evaluation to the process. Patricia Kallsen, with the Wisconsin Agency, and Harry Smith, with the Michigan Agency, supplied the leadership and continuing attention, without which this kind of effort would not have survived to completion.

Making this all come about took more energy than most would care to admit. There was not a "sluggard" in the lot of committees or support staff to the project, all of which was voluntary. Fredrick Menz (Research and Training Center, at the University of Wisconsin-Stout) and Geraldine Hansen (Regional Rehabilitation Continuing Education Program, at Assumption College and, formally, Director of the Regional Continuing Education Program, at Southern Illinois), working with the Regional Study Group, developed the research design and served as co-facilitators for the Technical and Policy Groups. Donald McLaughlin (Associate Director of the Computer Center for the Research and Training Center at the University of West Virginia) conducted the sampling and completed the computer analyses for the design set by the Study Group.

The coordination provided by Meg Ford, and before her Sue Kidder and Suzanne Lee (all with the Wisconsin agency), assured that leadership and the fantasies of those of us on the various committees neither outstretched realities nor fell short of having resources available and needs met when they were supposed to be there. Constance Brown, Indiana; Bill Forney, Illinois; Rick Hall, Wisconsin; Gene Hogenson, Minnesota; Marcia Jagodzinske, Minnesota Blind; Suzanne Lee, Wisconsin; Han Chin Lieu, Minnesota; Carolyn Scheifer, Ohio; Greg Shaw, Ohio; Harry Smith and Robert Struthers, Michigan did the research: They analyzed, compiled and synthesized; drew the conclusions; argued the history of equity and the meaning and implications of the research; and developed policy and issue recommendations for their state agencies to act upon.

Once the Study Group had completed its analyses and writing efforts, critical responses were solicited from a national panel of peer reviewers selected for their expertise in research, women's issues, and public policy. Again, unselfish investments were provided. Feedback was sought and received over a two-week period during the summer. While the Editors maintain responsibility for errors and interpretation, the reviewers' critiques became the substantive basis for measurably improving the report. We humbly thank those we asked and who provided reactions, comments, critique and review: Bobbie Atkins, University of Wisconsin-Milwaukee; Joan Barker, National Rehabilitation Association; Gary Bond, Indiana University-Purdue University, at Indianapolis; Terry Conour, Rehabilitation Services Administration; Marita Danek, Gallaudet College; Valerie Ellien, New York University; Donald Galvin, National Rehabilitation Hospital; Peter G. Griswold, Michigan Rehabilitation Services; Rochelle Habeck, Michigan State University; Marilyn Hafer, Southern Illinois University; Donald Harrison, University of Michigan; Richard Lawrence, University of Maryland; Ranjet Majumder, West Virginia University Research and Training Center; Denise Tate, University of Michigan; and Carolyn Vash, Institute for Information Studies.

In addition to funds provided by the individual state agencies, this project was partially supported through grant funds provided by the National Institute on Disability and Rehabilitation Research to the Research and Training Centers at the University of Wisconsin-Stout and at West Virginia University and through training funds provided by the Rehabilitation Services Administration to the Region V Rehabilitation Continuing Education Program at Southern Illinois University. No small appreciation is extended to West Virginia RTC for its extensive computer work. Likewise, similar appreciation is extended to David Adams and the Region V RCEP for the continuous resources and material support provided for the study groups. In particular, the Regional Study Group acknowledges the substantial commitment of personnel, research and dissemination resources contributed by the University of Wisconsin-Stout RTC to this regional research effort. Finally, our appreciation really goes to Julie Larson at the RTC who kept the words flowing up until the last sentence was revised.

The Editors,
Research Study Group
Menomonie, Wisconsin
September, 1987

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I. EXECUTIVE SUMMARY

The purpose of the Region V study was to determine whether there were systematic gender differences along input, program, and output dimensions among the state vocational rehabilitation programs in Region V over a 13 year period, 1972 to 1984. The interdependence of gender, as well as fiscal year, on selected state-level indices of client characteristics, service delivery, and program impact were, therefore, examined in this research in order to answer the following questions:

> To what degree are there differences in the characteristics of men and women who apply for rehabilitation and have there been changes in such characteristics over this period of time?
>
> To what degree are there differences in the characteristics of men and women served by the Region V state rehabilitation programs and have there been changes in such characteristics over the period of time?
>
> To what degree are there differences in services provided to men and women in the Region V state rehabilitation programs? Have there been changes in patterns of service provided over the 13 years which favor one gender over the other?
>
> To what degree are there differential impacts and benefits of the programs for men and women? Have there been changes in impact which improve the gains achieved by men and women over the 13 years, and if so, do those changes favor one gender?

The regional research methodology used a "study group" approach. Under this model, state agency, federally funded research and regional training resources of the region were brought together to design, conduct, and develop alternatives for addressing an issue of regional concern. Data for the study were drawn from the R-300 data files that are submitted annually by each state agency to the Rehabilitation Services Administration. Independent random samples of men and women who registered for rehabilitation services (i.e., applicants) and of men and women who entered and completed the programs (i.e., served individuals) were drawn from the R-300 data files. State averages (for continuous variables) and percentages (for categorical variables), computed for each gender and fiscal year, were the units of observation under the selected analytic model. Personnel with program evaluation and policy making expertise from the eight General and Blind agencies in the six states, were subsequently convened to synthesize the findings and develop policies for remedying identified equity problems.

The Region V study of gender equity found important differences in characteristics, service patterns, and in outcomes and impacts of the Vocational Rehabilitation program on men and women in the Region. The results indicate a serious problem of inequity in the impacts of the vocational rehabilitation program on men and women with disabilities. The research clearly demonstrated that women with disabilities did not acquire financial resources and occupational success at the conclusion of rehabilitation comparable to those achieved by men.

The research raised very direct issues regarding what is occurring and helps to narrow attention to areas in which significant change in policy, procedure, and practice in rehabilitation programs can be implemented to help resolve the problem of differential access, services and outcomes for men and women with disabilities. That these inequities mirror the mores and beliefs which society holds regarding the traditional place and role of men and women in the labor force cannot be considered a caveat for dismissing the importance of these findings. The cumulative findings from research to date should not be considered so lightly. The following issues and recommendations regarding outcomes, inputs, processes, and systemic changes were formulated by the Region V Study Group:

Outcome Issues and Recommendations

Issues:

A. After vocational rehabilitation services, women rehabilitants in Region V earned less than men and had a greater probability of remaining below the poverty level. The 13 year data indicated that at closure women achieved less financial independence and maintained greater reliance on public assistance than men. This was true even though the financial resources available at the initial point of contact with the system were similar for men and women.

B. Over the 13 year period the Region V vocational rehabilitation system perpetuated the limiting effects of gender-role occupational stereotyping for women.

Recommendations:

Service needs of women with disabilities

State Vocational Rehabilitation agencies should examine their policies regarding provision of non-traditional combinations of ancillary services. The degree of flexibility with which rehabilitation agencies provide services which meet the unique needs of women with disabilities may profoundly affect the quality of vocational outcomes. Much consideration should be given to the provision of services which can support the successful outcome of cases involving women. Child care, transportation, maintenance and other ancillary services are apt to be important to women with disabilities. Standards for the provision of ancillary services should be reviewed for their relevance to need and consistency in provision. While fiscal restraints are a constant reality, ancillary services should not be the first expenditures to be cut.

Standards and criteria for success

State programs should establish meaningful standards and criteria for program access and successful closures. These should be incorporated into state plans and tied to program goals, training, and evaluation. The plan should include the following: (a) an alternative classification system for categorizing successful closures, (b) revised performance expectations for the rehabilitation program, and (c) timelines for achieving equity in service provision. An alternate classification system could include four types of successful outcomes: Competitive, sheltered, self-employed and homemaker, or unpaid family worker. Revised expectations for program performance should set targets for incidence of (a) acceptances of men and women, (b) closures into competitive employment, (c) closures into competitive employment with earnings above the poverty level, and (d) closures into competitive employment into occupations with career potential.

Review of homemaker closures

The use of "homemaker" as a closure option may be inconsistently applied from state to state, and may lead to systematic gender inequities. It is recommended that State Agency Management Reviews be conducted within Region V to clarify the conditions under which this form of closure is being used appropriately on behalf of women's needs. Findings and recommendations evolving from that effort should then be shared nationally to improve the appropriate use of this closure category on behalf of women and in terms of Title I funding and program performance goals.

Input Issues and Recommendations

Issues:

C. Vocational rehabilitation programs have not formalized systematic approaches to address the vocational experiences and characteristics of women.

D. Younger women are under-represented in the Region V vocational rehabilitation system. The 13 year data indicates that the referral process that encourages referrals of young men seems to be increasingly ineffective in fostering referrals of young women.

Recommendations:

Public image

State agencies should determine whether they are perceived as accessible and effective with women by their principal publics. These publics include legislators, citizenry (especially women with disabilities), former clients, referral sources, other human service organizations, and employers. The agencies should review and evaluate their media efforts to identify and eliminate sexist language and stereotyping in advertising, manuals, and information packets. Public relations plans should be developed and implemented which correct inaccurate perceptions of vocational rehabilitation and which depict women in non-sex stereotyped terms in brochures, annual reports, and news releases. It is also suggested that current staff recruiting and personnel practices need to be reviewed to determine whether those practices negatively impact upon women and the disabled women served by rehabilitation.

Relationships with principal referral sources

Vocational Rehabilitation agencies should conduct a systematic examination of current and potential sources for attracting women to the vocational rehabilitation program. This may require modifying working relationships with existing referral sources and development of understandings with new referral sources of what constitutes appropriate referral to rehabilitation programs. The image and message the Vocational Rehabilitation agencies need to project should emphasize (a) vocational rehabilitation effectiveness, (b) need for early mutual intervention with women with disabilities, (c) mutual collaboration in the formulation of vocational solutions, (d) providing referred women with an understanding of the importance of prevocational skills and skill acquisition, and (e) establishing joint responsibilities in successfully completing a planned vocational rehabilitation.

School to work transition

State agencies should develop programs for students with disabilities, especially women, that would accomplish the federal initiative to improve the transition from school to work. This collaborative effort with schools would integrate vocational rehabilitation counseling into the development of the vocational portion of the student's education plan and should increase the referral of younger women to the program. State agencies should develop and implement efforts with schools to provide opportunities for women students to explore and participate in non-traditional vocations. Such programs should break down sexual stereotypes by (a) providing role models of women in non-traditional occupations, (b) creating an awareness in young women of the need to plan for their own economic and vocational future, (c) emphasizing the economic aspects of vocational choice, and (d) emphasizing non-traditional occupations for women. The results of such collaboration would be (a) an enhanced vocational plan, (b) an educational plan that focuses on both vocational preparation and the independent living skills needed to support the student's vocational plan, (c) a student better prepared to make informed vocational and career decisions, and (d) timely and appropriate referral to a rehabilitation program.

Process Issues and Recommendations

Issues:

E. The joint development of the rehabilitation plan may be adversely influenced by the stereotypes and attitudes about women, men, and work that state agency personnel and clients bring to this planning process.

F. Although women enter the system with a higher level of education and are more likely to be sponsored in post secondary training their pattern of services does not yield earnings outcomes that are comparable to the earnings of men.

Recommendations:

Program policy and guidelines for practice

The state Vocational Rehabilitation agencies should conduct a comprehensive review of their policies, guidelines, and practices to achieve greater gender-equity. These reviews should identify and eliminate those items which are gender-biased and impact upon access to services, eligibility determination, goal selection, planning of services, and outcome. These reviews may also become the basis for developing performance standards for the incidence of women on caseloads and in closures.

Rehabilitation professional skill development

Efforts need to be initiated which will aid rehabilitation personnel to become more sensitive to the needs and problems women with disabilities face. Professional and inservice education entities need to develop and implement curricula and training programs which will emphasize awareness and sensitivity among rehabilitation staff to the characteristics and needs of women. Emphasis in curricula should contain the following: (a) psychology of work, (b) the psychological effects that being an older woman, single parent or displaced homemaker might have in returning to work after a change in marital status and/or a long absence from the labor force, (c) vocational development theories regarding women with disabilities, (d) awareness of non-traditional integrative approaches which meet the needs of both younger and older women in rehabilitation, and (e) systematic application of functional assessment to minimize gender stereotyping and gate-keeping practices.

Consumer education

The state Vocational Rehabilitation agencies should develop a consumer education process. The process should encourage full involvement by consumers in planning and directing their rehabilitation. The process should emphasize (a) need to promote assertiveness of individuals in pursuing non-stereotyped occupations, (b) assistance in the development of images of themselves in vocations based on successful role models of women with disabilities, (c) income and fringe benefit information available for non-traditional, high-yield occupations, (d) encourage women to see themselves as their main income source, and (e) encourage women to obtain relevant support and counseling for their families.

Systemic Issues and Recommendations

Issues:

G. The vocational rehabilitation system has been used as a societal change agent to create opportunities and to open avenues for equity. The data from the study argues for acceptance of a responsibility for establishing the necessary outreach and intervention strategies that will assure appropriate and equitable access, services, and outcomes for women with disabilities.

Recommendations:

Federal and state provisions for resolving inequity

The Rehabilitation Services Administration, the National Institute on Disability and Rehabilitation Research, and the Office of the Assistant Secretary for Special Education and Rehabilitation Services should initiate actions to accomplish the following: (a) coordinate policy to implement the gender-equity provisions of the Carl Perkins Act, (b) establish focused priorities for gender-equity concerns in long-term and short-term training grants, federally supported research grants and state plan targeted performance expectations for service provision to women receiving services under Titles I, VI, and VII of the Vocational Rehabilitation Act, and (c) modify the data collection system reporting requirements to more accurately understand gender-related issues and for program evaluation.

State rehabilitation agencies should initiate companion efforts to achieve the recommendations described above. Quality assurance units should be sensitized to the importance of disequity issues and design appropriate measures for the evaluation and identification of inequities in case work policy and practice.

Rehabilitation resources for obtaining solutions to problems of gender inequity

There are four principal vehicles within the rehabilitation community whose purposes are to support or conduct research studies, address program policy concerns, and to expand rehabilitation knowledge:

1. The Rehabilitation Services Administration's national data system contains indicators on all clients served by the state-federal Vocational Rehabilitation program. The data gathered through this system should include additional codes for full-time and part-time work and the value of fringe benefits received. With these kinds of data RSA could study issues such as differential economic gains for men and women

whose employment includes fringe benefits and compare the equity of their earnings in comparable occupations.

2. The National Institute on Disability and Rehabilitation Research should review the Region V research, the findings of other research, and the recommended areas for additional study. Based upon that review, priorities for research should be developed to solicit proposals to more fully determine the effects of gender-bias within the rehabilitation system.

3. The Congress through the Rehabilitation Act has established Research and Training Centers to address long-term issues and the needs of special populations such as head injury, blind, deaf, spinal cord injured, Native Americans, and Pacific Basin populations. A Research and Training Center should be designated with a core area to study and make recommendations regarding women with disabilities.

4. The Institute on Rehabilitation Issues addresses topics of significant concern to the rehabilitation profession. A training strategy is needed to address the effects of gender-bias among rehabilitation practitioners. A future round of issues should incorporate a focus on methods to eliminate gender-bias.

Professional basis for practice

The rehabilitation profession does not have a theoretical basis for the vocational guidance, counseling and rehabilitation of women with disabilities. It is recommended that the necessary research to develop such theories for practice be supported. That effort should address the following: (a) vocational decision-making of women, (b) assessment practices which focus on the functional capacities of women with disabilities, (c) counseling practices which optimize career choices for women, and (d) occupational development approaches which yield economic self-sufficiency for women.

Training needs of rehabilitation personnel

The state Vocational Rehabilitation agencies, in conjunction with preservice and inservice training resources, should prepare training and staff development plans which will enable vocational rehabilitation personnel to provide meaningful vocational counseling and guidance to women. An effective plan should include the following considerations: (a) self-identification of gender-bias, (b) the economic effects of gender-bias, (c) the entry and reentry problems of women pursuing careers, (d) pursuit of non-traditional vocational goals, (e) women's probable need to work in order to achieve self-sufficiency, (f) emphasis on decision-making in guidance, (g) use of current labor-market information, and (h) the importance of involving families in women's selection of non-traditional occupations.

External context for rehabilitation

Realizing that the practice of vocational rehabilitation does not occur in a vacuum, state agencies must educate those segments of the community which impact on the vocational development of women with disabilities. Legislators, employers, educators, and vendors need information which promotes a positive image of women with disabilities. Joint advocacy efforts with consumer and professional organizations concerned about women with disabilities should be encouraged.

Rehabilitation services purchased and provided by state agencies should be gender-neutral. Agreements between state agencies and providers of services should include non-discrimination and affirmative action provisos. Because service providers may have developed their services and programs mirroring the gender stereotypes in the work force, it may also be necessary to develop joint training aimed at increasing their awareness of the needs of women with disabilities.

Research and policy studies

This research effort was limited to selected R-300 data for the period between 1972-1984. While the findings are significant and have led to positive recommendations for action by the profession, there remain questions for further study. The recommendations for further research are the following:

1. The state programs vary in their registration of persons seeking access to the rehabilitation system. This study did not address outcomes for all persons who may have sought access to the system but did not enter applicant status. A gender study should be conducted to examine the impacts of gate-keeping practices.

2. The decrease in referrals from welfare and education agencies and the decrease of younger women in the system should be investigated. The research should focus on the causes for non-referral or non-application.

3. With the recent emphasis on transitional programming, current data on referrals from educational agencies should be reviewed to determine if any changes in referral patterns have occurred. These findings might provide a measure of the effectiveness of the initiative on transition between schools and the vocational rehabilitation programs.

4. An analysis of comparable data should be conducted which excludes rehabilitated individuals with no reported earnings. The homemaker classification is a female dominated category, while unpaid family worker is male dominated. Further analyses could clarify the extent of differential gender effects on earnings.

5. The R-300 reporting system classifies jobs based on the Dictionary of Occupational Titles. A study should be conducted which identifies gender-specific earning differences across similar occupations to

determine if there are doubly adverse impacts for women with disabilities.

6. A study should be conducted of successfully employed persons to review fringe benefits for men and women. The outcome of this research could demonstrate whether the gap in financial resources between employed men and women is even wider than found in the current research.

7. A study needs to be conducted to investigate the degree to which findings of inequities in earnings of men and women are confounded due to inclusion of persons in full and part-time employment statuses.

8. A study needs to be conducted to determine whether there are additional adverse effects of inequity among minority group members with disabilities. Research into multiple minority groups has only recently been initiated.

9. The earnings data in this study is based on earnings at closure. A longitudinal study could reveal both the long-term impact of vocational stereotyping and whether the gap between earnings by gender narrows.

10. A national initiative is needed to replicate key aspects of this study. Such an effort could verify whether the findings are limited to Region V or may be applied more broadly.

11. Finally, a follow-up study is needed to determine the impact of the Region V study on changes in policy and gender equity among the states. That study should occur within 3-5 years.

II. INTRODUCTION AND STATEMENT OF THE PROBLEM

There are major domestic, societal and institutional constraints facing women and especially women with disabilities in the labor market today. The impact of these constraints upon individual women may remain a matter of contention, but their existence is not. A growing body of literature has suggested that there is a dual impact of gender and disability discrimination in the work force.

The state-federal vocational rehabilitation program was established under the Smith-Fess Civilian Rehabilitation Act (P.L. 66-236) in 1920 to assist individuals with disabilities that limit their vocational options to enter or re-enter the labor market. As Cowin and Ford most recently observed (1986), vocational rehabilitation's mission is "... to assist, to facilitate, to provide guidance toward the fullest possible participation in the community for individuals with disabilities. The cornerstone of participation is economic independence -- meaningful employment" (p. 77). Equity issues surrounding the achievement of these goals by women with disabilities have been raised with increasing frequency in recent years. However, too little research has been conducted on the interaction of gender and disability discrimination issues to offer conclusive generalizations.

Since its origin, the intent of the vocational rehabilitation program has been to achieve optimal economic self-sufficiency for both men and women. Given the general inequities found in society at large and the singularly important role assigned to rehabilitation, it is of considerable interest to determine whether similar gender inequities are evidenced in access, service and benefits received from vocational rehabilitation practices. The present study sought solutions to the general problem of inequity by examining program data on demographic characteristics, acceptance patterns, service delivery and impacts on women and men in Region V's vocational rehabilitation program for the period 1972 to 1984.

Federal Legislation

In 1920, the passage of the Civilian Rehabilitation (Smith-Fess) Act, (P.L. 66-236), established the state-federal vocational rehabilitation program to assist individuals with disabilities that limit vocational options to enter or re-enter the labor market in a productive way. Also, during the 1920s, the Women's Bureau of the Department of Labor was established to deal exclusively with the concerns of women in the labor force. Today, the Women's Bureau continues to monitor women in the labor force, identify key issues and provide advocacy and assistance for working women (Coalition on Women and the Budget, 1984).

Women are covered by all civil rights laws and regulations. Title IX of the Educational Amendments of 1972 mandates equity in education. Title VII of the 1964 Civil Rights Act stipulates that discrimination based on gender is prohibited. Title V of the Rehabilitation Act of 1973, as amended, consists of seven sections which cover employment of qualified persons with disabilities, elimination of physical barriers to employment and services, non-discrimination in the provision of services to and employment of persons with disabilities.

> [Section 504] became effective in 1977 and is considered to be the major U.S. civil rights law for people with disabilities. This section prohibits discrimination on the basis of disability in any program or activity receiving federal financial assistance and in all agencies of the executive branch of the federal government (Office of Equal Opportunity, 1982).

In 1975, the Education For All Handicapped Children Act (P.L. 94-142) guaranteed "free and appropriate" public education to all students. Recently, the Carl Perkins Vocational Education Act (P.L. 98-524) extended vocational education guarantees to women, single parents, heads of household and people with disabilities.

Although such legislation is intended to secure equal opportunity for all women the Carrick and Bibb (1982) review of legislation and special services available to women, suggested continuing difficulty:

> All of these have benefits available to disabled women, either because they are women or because they are disabled. If both the spirit and the letter of the law were implemented, perhaps there would be little need for papers and/or seminars that address the topic of "Women and Rehabilitation." Unfortunately, this is not reality, and it is important that we discriminate the real from the ideal, and laws often reflect the ideal (p. 35).

Clearly, these laws and regulations are intended to assist both women and men with disabilities to obtain vocational rehabilitation services, to receive the education that best meets their needs and to be able to obtain suitable employment. Existing evidence indicates that such gains have been minimal and that the economic position of women remains an issue.

Women in the Work Force

Demographics

In 1983, the U.S. Department of Labor reported that women represented 53 percent of the population. Women also exceeded 50 percent of the working age population at that time. In 1982, nearly 48 million women were in the labor force: 53 percent of all women 16 to 64 years of age and 43 percent of the entire civilian labor force (U.S. Department of Labor, 1983). Increases in women in the labor force accounted for 65 percent of the increase in employment from 1972 to 1982 (Reder, Arrindell & Middleton, 1984).

Marshall (1983), reviewing women in the labor force, notes historically:

> In 1950, 70 percent of American households were headed by men whose income was the sole source of family income. Today, less than 15 percent of households fit this "traditional" model, even though many of the nation's employment policies assume it still to be pervasive (p. 6).

During 1981, the labor force participation rate for mothers was 56 percent, a rate higher than among all women. In March 1982, the rate for mothers had increased to 59 percent, again, higher than that for all women. This trend indicated an increasing rate of participation in the labor force by married women and especially for women with children. Two-thirds of the mothers of children 6 to 17 years of age and 50 percent of the mothers of children under 6 years of age were in the labor force (U.S. Department of Labor, 1983). Further, the number of families now headed by women has increased sharply. More than one in seven families (9.1 million) is headed by a woman, rising by 65 percent since 1970, largely because of the climbing divorce rate (U.S. News and World Report, 1982).

Education

"Education has indirect but long-term effects on a woman's well being. When a woman's education has not adequately prepared her for employment, she and her children may be destined to live in poverty" (Malendez, 1983). The League of Women Voters Educational Fund review of literature on the link between education and employment found documentation of gender stereotyping and segregation in the educational experience of women which appeared to lead women into low-wage occupations and men into more highly paid occupations. As a follow-up, the Fund launched a five-state monitoring project to track state and local responses to the gender equity provisions of the 1976 Vocational Education Amendments intended to eliminate discrimination and stereotyping based on gender. In general, the results of this project indicated that women and girls had made few inroads into the courses of study traditionally dominated by men and that, as a result, women continued being tracked into the lower-paying, dead-end jobs that only perpetuate the gap in earnings between men and women (Reder et al., 1984).

The American Council of Life Insurance (1983) found that the educational achievements of working women are comparable to those of men. Eighty-one percent of all working women are high school graduates, as compared to 77 percent of all working men. Of all working women, about 17 percent are college graduates, as compared to 21 percent of all working men. In March, 1981, the median educational attainment for both men and women was 12.7 years.

Recent population surveys also confirmed the relationship between education and employment. The more education women received, the greater the likelihood they would be in paid employment: Twice as great a proportion of women in the labor force as women not in the labor force (15.7 versus 7.5%) were college graduates and 22.9 percent of women not in the labor force had 8 or fewer years of education, compared to 5.9 percent in the labor force (U.S. Department of Labor, 1983).

Discrimination

Discrimination against women exists in education, employment, equal pay and benefits. This discrimination "exists in all countries....usually embedded in traditional values, restricts women's chance for self-improvement and development" (Tate & Weston, 1982, p. 222). Until society reevaluates these stereotypic views and changes them, women will continue to have barriers to becoming self-actualized (Atkins, 1982).

Discrimination or role-stereotyping and its effects were succinctly described by Vash (1982):

> Members of groups targeted for exclusion are persuaded, and society at large is convinced, that for them to play certain roles is "unnatural," "inappropriate," or "impossible." Little girls are taught to aspire to become nurses, not doctors; vocational rehabilitation clients must entertain only "feasible" (low cost, low risk) goals; black, disabled, and female students are forgiven, not pushed, when mathematics or science concepts are difficult for them; and we are all prepared early to expect deterioration and yield our employment rights when we become old. (p. 199)

Once subservient behavior and stereotyped roles have been adopted and accepted by a few generations, they become the natural order of things. In order to change these now socio-culturally adopted stereotypical roles, organized action will be required. "Unfortunately, inner barriers of fear and ignorance often accompany outer barriers of discrimination and neglect" (Vash, 1982, p.199).

Occupation and Income

Women have transformed their "traditional" role in society in the past two decades but, in an absolute sense, the economic position of women remains the same. The labor force participation of women increased from 38 percent to 52.9 percent between 1962 and 1982 (U.S. News and World Report, 1982). Comparing full-time and part-time employment (less than 35 hours per week) for men and women, the Department of Labor found that women are much more likely to be working part-time. Among all women workers, 23 percent were usually part-time, compared with 8 percent of all male workers. The disparity was even greater among workers in the 25-to-54 years age group, with 19 percent of the women and only 2 percent of the men working part-time (U.S. Department of Labor, 1983).

Employment statistics for 1981 and 1982 revealed that women and men are still employed largely in traditional, gender stereotypical occupational groups (Barker, 1982). The greatest number of women continue to be employed in clerical, teaching, retail sales and service jobs; while the greatest number of men continue to find employment in skilled craft, operative and management jobs (U.S. Department of Commerce, Bureau of Census, 1987). In general, the jobs in which 80 percent of women are employed are low-paying, provide little opportunity for advancement and are occupations in which the risk of displacement has increased due to technological advances.

Spain (1985) provided a more current profile of the occupations in which women are clustered. Of the total number of women employed, more are in clerical occupations (33.8%) than in 1950 (27.4%) and fewer are in blue-collar jobs today (35.5%) than in 1950 (43.9%). Encouragingly, she also determined:

> There has been a small increase in those women in managerial or administrative positions: 7.4% in 1982 compared with 4.3% in 1950. Better yet, though, is the comfortable gain in the professions. In 1950, the percentage was 12.2 and in 1982 it was 23. Half of those women are either nurses or teachers, but the rest of them are doctors, lawyers, professors and scientists -- occupations that were once almost solely the province of men (p. 43).

In 1979, when the Department of Labor compared education and earnings data for men and women, it was found that women college graduates earned less than men with an eighth grade education. In 1982, fully-employed women who were high school graduates had less income on the average than fully-employed men who had not completed elementary school. Nevertheless, the more education a woman had, the more likely she was to be in the labor force (U.S. Department of Labor, 1983).

However, while the annual median earnings for women employed full-time, year-round were 64 percent of the earnings of full-time, year-round employed men in 1955, by 1981, the median income of women had slipped to 59 percent of comparable male income. By 1983, women's earnings were back up to the 64 percent of 1981, but no real gain had been made (Spain, 1985). This "increased" median income of women workers has not actually improved their general economic status. Women often continue to often have earnings at or below poverty-level income. This is a situation that does not appear to be improving and it has been estimated that by the year 2000 women and children will make up the population in poverty (Coalition on Women and the Budget, 1984).

Women with Disabilities in the Work Force

Demographics

According to the 1982 March Current Population Survey, of those of working age, 13.1 million or 8.9 percent were classified as having a work disability: 8.5 percent or 6.4 million working age women and 9.3 percent or 6.7 million working age men. Of these, nearly 66 percent of the men and 80 percent of the women were not part of the work force.

A comparison of employment data for men and women with and without a work disability reveals the following percentages of people working year-round, full-time in 1981: 61.4 percent of men without a disability, 22.3 percent of men with a disability, 32.7 percent of women without a disability, and 7.4 percent of women with a disability (Asch, 1984).

The characteristics of the population of women with a disability are not very different from those of all women. Women with a disability, on average, tend to be somewhat older (six of every ten women of working age who have a work disability are 45 years of age or older), have less education (one in six, as opposed to one in twenty-eight), have less than eight years of formal education, and are more frequently divorced or separated than other women (Bowe, 1984).

Discrimination

A woman has traditionally been defined and valued by her relationship with a man, emphasizing either her role as a mother or wife or as a sex object. For the woman whose disability may have caused the impairment of one or more of these roles, discrimination is greater. "Disabled women are often seen as being of little value or being less 'fit' for performing most roles required by society, be that role homemaking or obtaining gainful employment" (Tate & Weston, 1982).

Women with disabilities face double discrimination based on both their disability and their gender (Brooks & Deegan, 1981; Deegan, 1981; Holcomb, 1984; Saviola, 1981). Saviola described this situation as "double jeopardy" since the stereotypes ascribed to people with disabilities and women in general consist of passivity, dependence, helplessness and failure. Minority women with disabilities appear to encounter even more discrimination due to the combined impact of race or color, disability and gender (Atkins, 1982; Deegan, 1981).

In society today, women with disabilities are characterized by the absence of sanctioned social roles and/or institutional means to achieve these roles, what Merton (1967) called "rolelessness." The absence of sanctioned roles can cultivate a psychological sense of invisibility (O'Toole & Weeks, 1978), self-estrangement and/or powerlessness (Blauer, 1964). Therefore, women and girls with disabilities, without roles and role-models to adopt or reject, may find themselves unable to estimate their actual abilities or to be unable to speculate on what are realistic aspirations. As Fine and Asch suggest, "The disabled woman confronts the sexism experienced by most women, but is deprived even of the fragile pedestal on which non-disabled women are often placed" (1981, p. 248).

The inability to fulfill one or more traditionally defined roles, together with the absence of alternative role models, may also compound the low self-esteem experienced by many women (Danek & Lawrence, 1985; Sanford & Donovan, 1984). When serious attempts to achieve economic independence result in low pay, inadequate benefits and no opportunity for advancement, the prospect of continued dependency can discourage the most motivated job seeker (Saviola, 1981; Weinberg, 1976).

Vocational Rehabilitation and Gender Equity

Access

Although women appear to be accepted for vocational rehabilitation services at a slightly higher rate than men, they are under-represented in the client population compared to their incidence in the general population (Danek & Lawrence, 1985). Danek and Lawrence made this observation based on evidence from a single state agency; Harrison and Wayne (1987) confirmed it at the regional level. Although differences in acceptance rates for men and women in different regions of the country were identified, Harrison and Wayne noted, "...based on the prevalence of disability in the Northcentral [states], females are under-represented as rehabilitation applicants and clients" (p. 35).

Employment and Income

In the early 1970s, using Social Security surveys, Levitan and Taggart (1977) found that the national employment rate for working age adults without disabilities was 95 percent for men and 54 percent for women. The employment rate for adults with disabilities was one-third lower: 60 percent among men and 29 percent among women. The rate for adults with severe disability was 21 percent for men and only 9 percent for women.

Average earnings reported in the Levitan and Taggart study also indicate salary inequities related to gender and disability. White men with disabilities earned 58 percent of that earned by white men without disabilities in the same age bracket. Meanwhile, white women of the same age with disabilities earned only 10 percent of the amount earned by white men without disabilities.

In their review of rehabilitation closures, Goldberg, Bernard and Granger (1980), found that successful closures from vocational rehabilitation were generally higher for women, but that these higher rates were a function of the nature of types of allowable closures: Women were more likely to enter part-time work or return to "homemaker" status, while men were more likely to enter employment within the primary labor force outside the home. Their earnings levels, however, were only 56 percent of those of male rehabilitants.

Gender-Bias

The literature reviewed confirms the general expectation that women with disabilities face discrimination in education, employment, benefits and equal pay. In this context, "gender-bias" may be described as the set of assumptions that define women and their employment options predominantly in terms of "traditional" roles in society. Today, the fact that these roles were never absolute is largely overshadowed by the fact that they are basically, economically unrealistic, particularly for women with disabilities.

One of the most detrimental forms of gender-bias or gender-discrimination for these women may result from the well-meaning assessment conducted by rehabilitation professionals. If their view of "a woman's employment potential" is stereotypically limited, they may effectively restrict the individual's considerations of employment options in an even more direct and economically destructive manner than other forms of discrimination. This may be particularly true when such narrow perceptions coincide with a limited, negative self-image held by the woman seeking vocational assistance (Egelston & Kowolchuk, 1975). This gender-bias does not appear to be any less powerful among vocational rehabilitation counselors than it is in the general (Pietrofesa & Schlossberg, 1970).

In 1971, Ginsburg observed that rehabilitationists needed to be aware of the changes occurring in the role of women and consider whether adequate preparation had been made in the field (e.g., counseling, education). At that time, he stated, "The increasing acceptance of women as workers represents a clear challenge to guidance. The field has paid inadequate attention to women at every stage of the career process: in curriculum and course selection, in career planning, and in assisting those who seek to return to the labor force after a period of homemaking and child bearing" (p. 318).

Pietrofesa and Schlossberg (1970), in a study involving 29 students in counselor training, found that students of both genders ascribed certain roles to men and to women and that the counselor's interview behavior reflected these biases. In a follow-up, Pietrofesa and Schlossberg again identified the presence of gender-bias in counseling and concluded, "Since people-in-general hold strong beliefs about sex-appropriate behavior, we can assume that counselors also hold to these notions .... counselors need to be aware of the degree to which they try to push counselees into certain directions because of their own sex biases" (p. 45).

Gender-bias among school counselors, both men and women, was also identified by Thomas and Stewart (1971) and Nutt (1979). Therapists were found to be gender-biased in studies completed by Broverman, Vogel, Broverman, Clarkson and Rosenkrantz (1972) and Dailey (1979). Other studies have found that schools and families had lower expectations for women with disabilities and assumed that they would not be in the labor force (Asch, 1984; Browne, Conners and Stern, 1985; Campling, 1981; O'Toole & Weeks, 1978).

More recently, Gilbert (1983) and Flottum (1984) examined gender-bias among vocational evaluators and rehabilitation counselors. Gilbert noted, "The existence of sex bias causes client data to be synthesized differently for male clients than for female clients and the effects of perceived sex of simulated clients are consistent for groups of evaluators, regardless of the evaluator's gender and regardless of the evaluator's experience performing evaluations" (pp. 56-57). Following file reviews focused on functional assessment of men and women receiving vocational rehabilitation services, Flottum (1984) concluded that there were predictable differences in the way men and women were assessed and that these differences reflected gender-bias on the part of vocational rehabilitation counselors. Cowin and Ford (1986) suggest that the such gender-bias found among vocational rehabilitation counselors and among the women they counsel may, in large part, explain the greater incidence of "successfully rehabilitated" women being closed as no-pay homemakers or in low-pay, "traditional" occupations.

Gender Equity in Region V

Between 1971 and 1984, 1,749,254 individuals with disabilities registered for services in regional state-federal vocational rehabilitation programs (General, Combined and Blind agencies) in Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. Data on access, services and benefits in vocational rehabilitation for random samples of 1000 registrants for rehabilitation services from each state for each year 1972 to 1984 revealed continuing, differential access and impacts of rehabilitation for males and females.

In both 1972 and 1984, roughly equal percents of men and women registrants for rehabilitation services were accepted (53% in 1972 and 55-56% in 1984), but there was a significant increase in the proportion of women registrants who were heads-of-household (from 22 to 32%). While women also continued to more likely be successfully rehabilitated (43 versus 39% in 1972 and 36 versus 33% in 1984), the program does not appear to equally benefit them. First, women were more likely to be closed as "homemakers or unpaid family workers" (12 versus 3%) and less likely to enter competitive employment (45 versus 49%) in 1984. Second, while there were significant increases in dollar-earning-gains from rehabilitation for both men and women since 1972, their net dollar gain between acceptance and closure for women was just over $5100, while the gain for men was $8200 in 1984. Finally, while there were substantial gains for both men and women in earnings at closure, the earnings of women who entered competitive employment in 1984 were still only 63 percent of those of men. Closed competitively employed males in the 1984 sample had average earnings of $9600, while competitively employed women's earnings were $6700.

The evidence to date strongly suggests the outlines of a considerable problem of gender equity in vocational rehabilitation. However, it is not explicit in terms of how meaningful and different are the gains made by men and women served by the program, whether the problem is isolated in acceptance practices or in service delivery, whether the problem is becoming more pervasive, and whether the rehabilitation program might self-correct these inherent problems. The present study was attempted to acquire a better understanding of the extent of the problem of gender inequity at a regional perspective (among the state agencies in Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin) and formulate policy recommendations for correcting the bases for the problem in the rehabilitation system.

The present study arose from an acknowledgement that the literature and research have identified distinct problems for women with disabilities and a conviction among the State Directors in Region V that lasting solutions could be most effectively derived through a regional effort. The State Directors of Region V, therefore, authorized a study to: (a) fully study the issue of gender-bias in the Region's programming, and (b) formulate substantive recommendations on policy and practice which could be developed and implemented to remedy the dual impact of gender and disability in the Region's programming.

III. METHODOLOGY

The purpose of the study was to determine whether there were systematic gender differences along input, program, and output dimensions among the state vocational rehabilitation programs in Region V over a 13 year period, 1972 to 1984. The interdependence of gender, as well as fiscal year, on selected state-level indices of client characteristics, service delivery, and program impact were, therefore, examined in this research in order to answer the following questions:

> To what degree are there differences in the characteristics of men and women who apply for rehabilitation and have there been changes in such characteristics over this period of time?
>
> To what degree are there differences in the characteristics of men and women served by the Region V state rehabilitation programs and have there been changes in such characteristics over the period of time?
>
> To what degree are there differences in services provided to men and women in the Region V state rehabilitation programs? Have there been changes in patterns of service provided over the 13 years which favor one gender over the other?
>
> To what degree are there differential impacts and benefits of the programs for men and women? Have there been changes in impact which improve the gains achieved by men and women over the 13 years, and if so, do those changes favor one gender?

The regional research methodology used a "study group" approach. Under this model, state agency, federally funded research and regional training resources of the region were brought together to design, conduct, and develop alternatives for addressing an issue of regional concern [1]. Data for the study were drawn from the R-300 data files submitted annually by each state agency to the Rehabilitation Services Administration (RSA). Independent random samples of men and women who registered for rehabilitation services (i.e., applicants) and of men and women who entered and completed the programs (i.e., served individuals) were drawn from the R-300 data files. State averages (for continuous variables) and percentages (for categorical variables), computed for each gender and fiscal year, were the units of observation under the selected analytic model. Personnel with program evaluation and policy making expertise from the eight General, Combined and Blind agencies in the six states, were convened to synthesize the findings and develop policies for remedying identified equity problems.

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[1] See Appendix A for a description of the Regional Research Model.

Development of the Methodology

Selection of the analytic model for this study resulted from a number of methodological and empirical considerations stemming from decisions to use the R-300 data and to examine the issue of gender across the 13 year period. By making these decisions, rather than designing a study in which unique client data were collected, limitations were placed on how well confounding variables could be controlled and, therefore, how unequivocally the data could accurately assess program impact. The R-300 data-base contains measures on over 100 applicant characteristics (e.g., age, education, earnings at application), service delivery characteristics (e.g., months, costs) and indicators of program impact (e.g., type of closure, earnings at closure). These data are also a mixture of categorical (e.g., ordinal age categories, nominal ethnicity categories) and continuous measures (e.g., annual income) of client and program characteristics. These data are reported by state and by the federal fiscal year in which individuals leave the program, not by year in which individuals apply to the program.

Both simple and complex parametric models and non-parametric models were considered before ultimately selecting a simple analysis of variance approach for this study. A multivariate model would have been preferred because such a model could account for the simultaneous interdependence of several dependent variables and could reduce the probability that significance was a function of repeatedly "dipping into the same pool of observations." However, the simpler model was seen as more parsimonious for the purposes of this study group approach.

Though not an experimental design, the approaches taken in sampling, data aggregation and interpretation attempted to limit the adverse effects encountered when relying on existing data and using elementary statistics as tools to guide decision-making. Some of the limitations of these decisions are indicated and should be kept in mind by the readers as they evaluate how cautiously the study was implemented and how compelling the findings are in light of those limitations. The following are considerations made in developing the methodology for this study:

First, the issue in the study was to determine whether and in what ways there were systematic gender differences associated with Region V state rehabilitation programming, not to distinguish between the state agencies. Equity should be studied in terms of "consistency among the state-level programs." State-level indicators, rather than client-level measures were the level of observations sought in the study and subsequently submitted for analysis.

Second, not all the data in the R-300 were of concern. A subset of the R-300 data was chosen before developing the analytic model. For instance, the program principally serves a population 16 to 64 years of age. Whether those under 16 or over 64 are being served equitably is of lesser concern than how differently the program might be serving men and women who are in early and late stages of their vocational careers. Likewise, there are mandated priorities for the states to serve the most severely disabled. It is of considerable concern as to whether severely disabled men and women are being served in an equitable fashion.

Third, gender and time considerations shaped the selection of an approach in which gender, time, and their interactive effects could be simultaneously examined.

Fourth, given that the data were both categorical and continuous, an approach was needed which could accommodate or adapt both categorical and continuous types of data to a common level of measurement. State-level data, rather than client-level data (particularly for categorical data), would help meet basic assumptions required for use of parametric statistics.

Fifth, initial tallies and tests of significance involving individuals who attempted access or were served by the rehabilitation program over the 13 years suggested reliable (i.e., statistically significant) gender and time differences in likelihood of acceptance and in the program's impact on rehabilitation benefits. It was also evident that men and women were not equally represented and that time and gender differences could be systematically biased by this disproportionality. Whether these differences were important could not be assessed unless the disproportionate incidence of men and women in the analyses could be controlled. Equal samples of men and women, for each state during each fiscal year, were drawn and used to estimate the state-level indices.

Sixth, the approach should be appropriate for use in a consortia-like, group activity to isolate meaningful gender differences and changes over time. The method chosen was not dependent on an assumption of high level statistical training among the group members, but instead provided a consistent tool with which to guide their synthesis of the array of results and their decision-making regarding the issues underlying the study.

Sampling

The basic sampling design stratified on gender, federal fiscal year, and state [2]. Samples were drawn to achieve reliable state-level indicators for the selected dependent variables. Two major samples were drawn: One sample included all persons who registered for vocational rehabilitation services between 1975 and 1984. This applicant sample was drawn to determine whether there are gender differences among applicants on such characteristics as age, race, probability of acceptance for services. The second sample, the served sample, included only individuals accepted for services, served and closed between 1972 and 1984. Individuals included in this sample were those closed rehabilitated (i.e., closed in status 26) and individuals closed not rehabilitated (i.e., closed in statuses 28 and 30). It was drawn to determine whether there were gender differences: (a) in their characteristics at registration, such as age, race, education, income at acceptance; (b) in service provision such as months in status, expenditures for service; and (c) in outcomes and impacts, such as earnings at closure, competitiveness of employment at closure.

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[2] The sampling design and analytic model were formulated for the Region V Study by Fredrick Menz with the Research and Training Center at the University of Wisconsin-Stout. The samples were drawn from the full R-300 data tapes during the fall of 1986. Recoding of data and sampling were completed by Donald McLaughlin, Associate Director, Computer Center, at the West Virginia University Research and Training Center. Routines from the Statistical Analysis System (SAS) were used on West Virginia's IBM and VAX computers to recode and draw samples.

A total of 60,000 individuals were included in the applicant sample and a total of 78,000 individual cases were included in the served and closed sample. In each sample the representation of men and women was controlled by selecting equal numbers of men and women. That is, completely independent random samples of 500 men and 500 women were selected from the R-300 data file for each fiscal year and for each state program [3].

Before sampling, where states had both General and Blind agencies, their data sets were pooled to establish a "state program perspective" [4]. No attempt was made to control or stratify by type of disability. Also, for the applicant sample, it was necessary to estimate fiscal year of referral before selecting cases. Referral fiscal year was estimated by subtracting "total months 00 to closure" from the fiscal year in which the case was closed. As data were not consistently available to estimate referral year prior to 1975, the sampling of applicants, therefore, began with 1975, rather than 1972.

The Analytic Approach

State-level averages (e.g., average earnings at closure for men with reported earnings at closure in 1984 in Michigan) and state-level percentages (e.g., the percent of women who were black in Wisconsin closed during 1972) were the observational units submitted for analysis under the simple analysis of variance model (gender by fiscal year): In the analyses of data on characteristics of applicants for vocational rehabilitation, there was a total data set N of 120; in the analyses of data relating to individuals served by the program, the total data set N was 156.

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[3] Federal fiscal year used in the study is not the same as state fiscal years. In 1980, the Federal Government changed the fiscal year from July 1 - June 30 to a October 1 - September 30 year. This also created one 15 month federal fiscal year.

[4] When the substance and processes of vocational rehabilitation in the six states is intended, "program" is used. When the administrative unit responsible for carrying out rehabilitation in each state is intended, "agency" is used.

Data Submitted for Analysis

Table 1 lists the subset of R-300 variables submitted for analysis under the analysis of variance model (see Appendix H for listing of R-300 data). The variables are listed in terms of whether they represent (a) the characteristics of persons applying for rehabilitation and the characteristics of individuals accepted for vocational rehabilitation, (b) the provision of services, and (c) the impacts and benefits of vocational rehabilitation achieved by individuals. As previously indicated, state-level indices (percentages for categorical variables and averages for continuous variables) were computed for each variable. The N's for computing averages and percentages were 500 (the sample size for men or women for each fiscal year and each state). Smaller N's were involved when data were missing for individual cases; generally when the variable did not apply to the individual case (e.g., no income was reported at application, reason not rehabilitated did not apply to persons closed 26). The smaller N's occurred in very few instances.

Study Group Approach

The basic approach relied upon the technical and policy making resources of the rehabilitation agencies in the six states [5]. Two working task force groups were organized: Technical Group and Policy Group. Persons in each group were appointed by their state directors. The Technical Group consisted of persons with current or previous primary responsibilities in program evaluation at their agency [6]. The Policy Group included persons responsible for developing program policies for their state agencies [7]. Some transition between the groups was accomplished by having some state personnel assigned to both the Technical and Policy Groups.

The Technical Group met twice in Chicago on February 5-7 and March 5-7, 1987. During those meetings they were charged to review and synthesize the results of all the analyses. Prior to the meetings, all data analyses were completed (i.e., on selected data for applicant and data for served individuals). It was this group's task to identify (a) the extent to which there were conditions of inequity, (b) where changes were systematically

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[5] Coordination was provided by Meg Ford, Wisconsin Division of Vocational Rehabilitation. Regional coordination was provided by George McCrowey, RSA, Chicago. Research and group facilitation were provided by Fredrick Menz, Research and Training Center, University of Wisconsin-Stout, and Geraldine Hansen, Regional Rehabilitation Continuing Education Program I, Assumption College, Worcester, Massachusetts.

[6] Technical Group included Constance Brown, Indiana; Bill Forney, Illinois; Gene Hogenson, Minnesota; Rick Hall, Wisconsin; Han Chin Lieu, Minnesota; Greg Shaw, Ohio; and Robert Struthers, Michigan.

[7] The Policy Group included Constance Brown, Indiana; Bill Forney, Illinois; Gene Hogeson, Minnesota, Marcia Jagodzinske, Minnesota Blind; Suzanne Lee, Wisconsin; Carolyn Schiefer, Ohio; and Harry Smith, Michigan.

Table 1
Characteristic, Service and Impact Variables Examinined in the Study

CHARACTERISTIC, IMPACT AND SERVICE DIMENSIONS	Specific Variables Submitted for Analysis of Variance	Form of the State-Level Indicator
A. Applicant and Client Characteristics at Referral		
AGE LEVELS	16-24 year of age	Percent
	25-34 year of age	Percent
	35-44 year of age	Percent
	45-54 year of age	Percent
	55-64 year of age	Percent
HIGHEST GRADE LEVELS	8-11 grades completed	Percent
	12 grades completed	Percent
	13-15 grades completed	Percent
	16+ grades completed	Percent
ETHNICITY	White	Percent
	Black	Percent
	Spanish Surname	Percent
	Other	Percent
MARITAL STATUS	Married	Percent
	Widowed	Percent
	Divorced	Percent
	Separated	Percent
	Never Married	Percent
	Now Available, Unknown	Percent
HEAD OF HOUSEHOLD	Whether had dependents	Percent
SEVERELY DISABLED [a]	Whether were in federally targeted disability groups	Percent

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[a] Data on incidence of major disability categories were originally included when the data samples were drawn. However, the specific disability codes identified during sampling unintentionally excluded significant segments of the eligible population.

Table 1 (Con't.)
Characteristic, Service and Impact Variables
Examinined in the Study

CHARACTERISTIC, IMPACT AND SERVICE DIMENSIONS	Specific Variables Submitted for Analysis of Variance	Form of the State-Level Indicator
A. Applicant and Client Characteristics at Referral (Con't.)		
SSDI/SSI APPLICANT	Whether SSDI/SSI at application	Percent
PUBLIC ASSISTANCE APPLICANT	Whether receiving public assistance at application	Percent
REFERRAL SOURCES OF APPLICANT	Individuals and Private Organizations	Percent
	Health Organizations and Hospitals	Percent
	Public Organizations	Percent
	Welfare	Percent
	Education	Percent
WORK STATUS AT APPLICATION	Competitive	Percent
	Sheltered	Percent
	Business Enterprise Program (BEP)	Percent
	Homeworker	Percent
	Not Working	Percent
INCOME AT APPLICATION	Total annual wages plus public assistance (unadjusted)	Avg. Dollars
	All income, less amount for poverty level for number of dependents	Avg. Dollars
MONTHS TILL APPLICATION DECISION	Months in Statues 02-08	Avg. Months
PREVIOUS CLOSE	Whether had previously been client	Percent
APPLICATION DECISIONS	Whether accepted for services	Percent

Table 1 (Con't.)
Characteristic, Service and Impact Variables
Examinined in the Study

CHARACTERISTIC, IMPACT AND SERVICE DIMENSIONS	Specific Variables Submitted for Analysis of Variance	Form of the State-Level Indicator
A. Applicant and Client Characteristics at Referral (Con't.)		
REASONS FOR NOT ACCEPTING APPLICANT	Unable to locate	Percent
	Hard to serve	Percent
	Refused services	Percent
	Death	Percent
	Institutionalized	Percent
	Transferred to another agency	Percent
	No disabling condition	Percent
	No vocational potential	Percent
	Other	
	B. Service Provision Variables	
SERVICES ACCESSED	Diagnostics	Percent
	Restoration	Percent
	Training - College	Percent
	- Business	Percent
	- Vocational Technical	Percent
	- On-the-Job Training	Percent
	- Adjustment	Percent
	- Miscellaneous	Percent
	- Other activities	Percent
	Maintenance	Percent
	Other family	Percent
	No services bought/provided	Percent
AMOUNT OF SERVICES	Number services bought/provided	Avg. Number
EXPENDITURES	Total case service dollars	Avg. Dollars
	Dollars for facility services	Avg. Dollars
	Ratio of facility/total dollars	Avg. Ratio
TIME SPENT IN REHAB PROGRAM	Months to acceptance	Avg. Months
	Months to plan	Avg. Months
	Months to plan to closure	Avg. Months
	Total Months	Avg. Months

Table 1 (Con't.)
Characteristic, Service and Impact Variables
Examinined in the Study

CHARACTERISTIC, IMPACT AND SERVICE DIMENSIONS	Specific Variables Submitted for Analysis of Variance	Form of the State-Level Indicator
	C. Outcome and Impact Variables	
TYPES OF CLOSURE	Rehabilitated	Percent
	Not rehabilitated, no services	Percent
	Not rehabilitated, with services	Percent
REHABILITATION OUTCOMES	Competitive employment	Percent
	Sheltered employment	Percent
	Business Enterprise Program	Percent
	Homemaker/Unpaid family worker	Percent
	Not working	Percent
	Other, Unknown	Percent
OCCUPATIONS AT CLOSURE	Professional, technical, managerial	Percent
	Clerical and sales	Percent
	Service	Percent
	Agricultural, fishery, forestry and related	Percent
	Processing	Percent
	Machine trades	Percent
	Benchwork	Percent
	Structural work	Percent
	Miscellaneous	Percent
PUBLIC ASSISTANCE RECIPIENT	At application	Percent
	At closure	Percent
INCOME AT APPLICATION	Total earnings	Avg. Dollars
	Unadjusted for poverty level	Avg. Dollars
	Total adjusted for poverty level	Avg. Dollars
INCOME AT CLOSURE (competitively employed only)	Total earnings, unadjusted level	Avg. Dollars
	Total earnings, adjusted for poverty level	Avg. Dollars

occurring across the state programs, and (c) where there were systematic shifts in terms of how men and women were being affected by the Region V rehabilitation programs. They were also asked to develop basic profiles of equity and inequity which could then be used by the Policy Group in its task of providing interpretations based on their knowledge of rehabilitation programming, significant legislation and societal trends. These activities resulted in profiles of equity regarding: (a) characteristics of persons referred to rehabilitation and decisions made about acceptance and not accepted for services, (b) characteristics of persons accepted to the rehabilitation programs, (c) service utilization among those served in rehabilitation, and (d) outcomes and benefits individuals achieved from rehabilitation.

The Policy Group also met twice in Chicago on March 17-19 and April 13-16, 1987. Prior to their meetings, the results of the Technical Group's efforts were prepared and distributed. They were charged with accomplishing two primary tasks using the results of the longitudinal study prepared by the Technical Group: (a) determine the extent to which there is a problem of inequity in rehabilitation programming in Region V, and (b) identify options for practice and policy which may lead to remedying the problem and alleviating those conditions which lead to inequity.

At all meetings of the Technical and Policy Groups, the groups were divided into sub-groups based on each individual's knowledge of the issue and skills in use of the statistical techniques or in policy development. At the conclusion of each meeting, findings and recommendations were presented to the whole group for discussion and critique. Between meetings, materials were collated and distributed to members of both groups for further review and revision before the next meeting. The materials and products of the groups were later collated and distributed for review, critique and comment by state directors in Region V, by the study group members and by a national panel of peer reviewers selected for their expertise in research method, in women's issues and in state and federal policy [8].

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[8] The substance of this report was measurably enhanced by criticisms and comments provided by the state directors and colleagues around the country. The form of their individual contributions are noted in the Acknowledgements. However, while their contributions are recognized, any limitations, noted or not, remain the responsibility of those who guided the design and execution of this research. Participants and reviewers are listed in Appendix B.

IV. RESULTS

The results of the analyses of variance conducted on state-level data for persons who applied for vocational rehabilitation between 1975 and 1984 and for individuals served and closed between 1972 and 1984 are reported below. Gender differences and change across the several fiscal years are presented for: (a) characteristics of applicants for vocational rehabilitation services, (b) characteristics of individuals accepted and served by rehabilitation, (c) service provision, and (d) outcomes and benefits individuals achieved from rehabilitation.

Characteristics of Applicants to the Vocational Rehabilitation Program

The results of analyses of variance computed for data on the characteristics of persons registering for vocational rehabilitation services between 1975 and 1984 are abstracted on Table 2. In many respects, women and men who register with the vocational rehabilitation program are quite similar. They were found to be similarly distributed across dominant ethnic groups, have comparable and disastrous income resources at registration, and are similar in their likelihood of receiving social security benefits, being severely disabled (45%), and being accepted for services (42%). Women, though, were found to differ significantly from men at the time they register for services in that they tended to be older, have more education, were faced with changes in their marital status, were more likely to be on public assistance, and tended to be referred by welfare agencies, educational institutions or refer themselves to program services, compared to more men being referred by public organizations. Further, more women were classified homemakers at the time they applied, while more men were considered heads of households at the time they applied. General declines were found in the proportions of young applicants and of applicants not competitively employed. Increases were noted in the percents of applicants who were divorced of applicants who had at least completed high school. Referrals shifted from public organizations to self-referral. No apparent changes occurred in the percentages of individuals accepted, distribution of the applicant population among ethnic groups, and in the severity of disability within the applicant population.

Age Levels

More women than men are in age ranges 35-44 (18 versus 16%) and 55-64 (7 versus 6%). This is in contrast to more younger men applying to the program (age range 16-24, 35 versus 31%). In general, there has been an increase in the percent of applicants in the 25-44 age group coupled with a decrease in percentages of applicants in the age groups 16-24 and 45-54.

Marital Status and Heads of Household

Compared to men, more women were divorced (18 versus 8%), separated (7 versus 3%), or widowed (6 versus 1%). More men than women tend to be married

Table 2
Characteristics of Applicants for Rehabilitation
1975 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=120)	Men (n=60)	Women (n=60)
Age Levels [d]						
16 - 24	.000	.000	NS	32.92	34.70	31.14
25 - 34	.000	.000	NS	26.71	28.00	25.42
35 - 44	.000	NS	NS	16.93	16.24	17.62
45 - 54	.015	.002	NS	13.82	13.23	14.42
55 - 64	.003	NS	NS	6.52	6.00	7.05
Ethnicity						
White	NS	NS	NS	74.93	...	...
Black	NS	NS	NS	14.35	...	...
Other	NS	NS	NS	9.79	...	...
Spanish Surname	.003	NS	NS	1.61	1.90	1.32
Marital Status						
Married	.000	NS	NS	20.76	24.51	17.01
Widowed	.000	NS	NS	2.92	.86	4.99
Divorced	.000	.012	NS	12.08	8.61	15.56
Separated	.000	NS	NS	4.54	3.13	5.94
Never Married	.000	.007	NS	35.56	38.94	32.18
Unknown	NS	NS	NS	23.60	...	...
Head of Household	.001	NS	NS	30.26	32.83	27.68
Educational Levels						
8 - 11	.000	.001	NS	21.58	23.17	19.99
12	.013	NS	NS	29.68	28.04	31.33
13 - 15	NS	.002	NS	7.65	...	...
16+	NS	.004	NS	2.66	...	...
Severity of Disability						
Severly Disabled	NS	NS	NS	45.12	...	...
Public Assistance at Referral	.000	NS	NS	17.54	14.94	20.13
SSI/SSDI	NS	.000	NS	15.41	...	...
Referral Source						
Individual & Priv	.036	.000	NS	36.37	35.45	37.29
Hosp & Health Org	NS	NS	NS	18.14	...	...
Public Org	.000	.000	NS	28.07	30.71	25.42
Welfare	.000	.023	NS	7.03	6.07	7.99
Educational Inst	.040	NS	NS	10.30	9.58	11.03

Table 2 (Con't.)
Characteristics of Applicants for Rehabilitation
1975 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=120)	Men (n=60)	Women (n=60)
Previous Closure	NS	NS	NS	8.24	...	...
Reason Not Accepted						
Unable to Locate	NS	NS	NS	8.86	...	...
Refused Services	NS	.000	NS	22.05	...	...
Death	NS	NS	NS	.38	...	...
Institutionalzd	.000	NS	NS	.71	.94	.48
Transferred	NS	.014	NS	.58	...	...
Too Severe	NS	NS	NS	4.71	...	...
No Disability	.001	.000	NS	2.89	2.47	3.31
No Potential	NS	.000	NS	3.06	...	...
Work Status at Referral						
Competitive	NS	.001	NS	8.16	...	...
Sheltered	NS	NS	NS	.68	...	...
Self/BEP	.000	NS	NS	.36	.51	.20
Homemaker	.000	NS	NS	3.48	.63	6.33
Not Working	NS	NS	NS	56.51	...	...
Income at Referral						
Unadjusted	NS	NS	NS	1508.99	...	...
Poverty Adjusted	NS	.000	NS	-4533.24	...	...
Acceptance for Services						
Percent Accepted	NS	.000	NS	42.44	...	...
Months to 10	NS	.009	NS	5.01	...	...
Months to 08	NS	.000	NS	7.07	...	...
Percent in Extended Evaluation	NS	NS	NS	4.25	...	...

[a] Analyses of variance results are only abstracted here. Full details of the analyses are presented in Appendix C.

[b] Degrees of freedom in each analysis were as follows: Gender, 1; FY, 9; Gender by FY, 9; and Error, 111.

[c] State-level averages for continuous variables and percentages for categorical variables (computed for each sample of 500 randomly selected cases for each fiscal year and each state) were the observational units in the analyses.

[d] NS is entered when p-levels exceed .05. When no Gender differences were found, only the average across the 120 observations is displayed.

(33 versus 21%) or never married (54 versus 48%). The notable disparity between genders, with more men being married, is coupled with evidence of a modest trend toward fewer married men and more married women attempting entry to vocational rehabilitation. Also, a higher percent of men were heads of household at application (33 versus 29%), a percent that remained consistent over time.

The proportion of divorced women has remained about 7 percent greater than the proportion of divorced men across time. Though the incidence of divorce among applicants has significantly increased since fiscal year 1975, it reached its peak in fiscal year 1981 and leveled off since that time. These trends coincide with divorce trends in the general population.

Ethnicity

There was no significant difference between men and women in terms of ethnic representation: White, 83 percent; Black, 15 percent; and Other, less than 2 percent. More men than women have Spanish surnames (2 versus 1%), but the category involves relatively few applicants (less than 2%).

Educational Level

Women have attained higher educational levels at registration for services than those achieved by men. More men then women (23 versus 20%) are in the education category "grades 8-11," whereas a higher percent of women tend to be in the education category "12+" than do men (31 versus 28%). There was an increasing trend for both men and women to have post high school education, with a comparable decrease in percents of applicants in the 8-11 year level.

Special education approaches such as PL 94-142 may partially account for the lower percents of applicants who have not completed high school at application. Schools are now required to serve special education students until at least age 21. This may also partially explain increases in percents of applicants who are high school graduates.

Disability

Approximately 45 percent of all applicants were severely disabled and this rate remained relatively constant across the 10 year period for both men and women.

Referral Source

There has been a steady and major shift in referral sources over the years, away from public organizations and welfare agencies toward individual-self and private agency referrals. Women were more frequently referred by welfare agencies, even though welfare applicants declined from nine percent to five percent over the period. Women were more likely than men to be self-referred or referred by welfare and education while men were more likely to be referred by public organizations.

Possible factors behind the public-to-individual shift are decreased corrections applicants, changes to the Social Security rehabilitation program, self-insurance and a generally greater need for employment among women. The difference between men and women referred from educational institutions may relate to a higher high school dropout rate for men.

SSI/SSDI

It appears that changes in the percentage of SSI and SSDI applicants have not impacted men and women differentially. A one year increase in applicants receiving social security benefits was found for the fiscal year 1976 period, peaking at 19 percent. The percentage remained relatively stable at about 17 percent from fiscal year 1977 through fiscal year 1980. Since that time, it has declined steadily to around 10 percent.

The initial increase in social security beneficiaries may be a result of targeting the vocational rehabilitation program to serve the severely disabled. The substantial decline in more recent years is likely to be the result of changes in federal procedures from paying for all vocational rehabilitation provided services to social security applicants to a procedure of reimbursement only for successful rehabilitations.

Public Assistance at Application

Public assistance at application differed for men and women with more women receiving assistance than men (20 versus 15%). The higher percentage of women widowed, separated or divorced at application may account for higher rates of women receiving such public assistance as Aid to Families with Dependent Children (AFDC) and food stamps.

Work Status at Application

There was a significant decrease in the percentage of individuals who were competitively employed at application. This may be attributable to the 1980 economic recession and the effects of the 1978 amendments to the Rehabilitation Act. There were no gender or year effects found for sheltered employment or for the largest category of "not working." Men were roughly 2.5 times as likely as women to be self-employed, while women were 10 times as likely to be homemakers at application than men. When percentages of people classified as homemakers and unemployed at application were combined, the differences between the genders tended to disappear, raising a question as to possible stereotyping in the use of self-employment or unpaid workers classifications when coding applicants.

Income at Application

Whether adjusted to the poverty level or not, no differences in total income were noted between men and women at application between 1975 and 1984, in terms of unadjusted and adjusted income (income includes all sources, wages, public assistance, and subsidies). While the average income for applicants was approximately $1500 per year, since 1975 the real value of income available to applicants to the system has consistently eroded. In 1972-1973, applicant total income adjusted for poverty was -$3199. By 1983-1984, their adjusted income was -$5855, more than 80% below that for 1972-73.

Acceptance into System

Approximately 42 percent of men and women were accepted for services, with an apparent decrease in rates of acceptance since 1975. There were, however, no differences between men and women in length of time to determine their program eligibility (months to reach status 10), but there was a gradual reduction in the number of months to reach a decision over the 10 year period. It took about six months to determine eligibility in 1975-76. By 1982 that decision was typically reached in five months. Ineligibility decisions took between eight and nine months in 1975-76 and had dropped to under seven months by 1980-81. Approximately 4 percent of both men and women applicants were referred to extended evaluation (status 06). Approximately 8 percent of the applicants had previously been closed from rehabilitation within the previous twelve months. This rate has remained generally the same across the 10 years for men and women.

Reasons Not Accepted

Approximately 57 percent of applicants referred for rehabilitation were not accepted. Among the reasons for not being accepted, there appears to be very little shifting between 1975 and 1982. Shifts have occurred mostly in 1983 and 1984, suggesting that these may be due to the "time" factor (i.e., how recently closure data were available for estimating the fiscal year in which individuals registered for services). Only for the reasons "Institutionalized" and "No disabling condition" were gender differences found and these differences, though stable, were small: Institutionalized, men .5 percent and women 1 percent; No disabling condition, men 2.5 percent and women 3.3 percent. After adjusting for the proportion of rejections for service, Refused services (38%), Unable to locate (15%), Disability too severe (8%) and No disabling condition and No vocational potential (each 5%) have been the major reasons given for not accepting men and women over the 10 year period.

Characteristics of Accepted Individuals

Table 3 summarizes findings regarding the characteristics of persons accepted and served between 1972 and 1984. For most of the variables, no interaction effects between gender and years were found, indicating that the relative values for men and women have not changed appreciably over the years. Region-wide trends toward somewhat older clients with more education and a trend toward being divorced at application are shared by both men and women.

Compared with men, women accepted for vocational rehabilitation tended to be somewhat older (more in age range 45 to 64, 18 versus 15%). They had more education (completed high school, 37 versus 34%) and were more often widowed, divorced, or separated (31 versus 13%). More than men, they tended to be referred by individuals-private organizations or welfare organizations (46 versus 41%) than by other public organizations (14 versus 21%). More women were receiving public assistance (25 versus 18%) and had less total gross income than did men ($1259 versus $1394). However, when the incomes of both men and women were adjusted for poverty, the income of both men and women at registration were equally and substantially below the poverty line at registration: Adjusted income, -$4049.

Women did not differ appreciably from men in severity of their disability (42%), ethnicity (White, 83%; Black, 15%; Other, 2%), whether they had previous rehabilitation services (19%), and whether they were receiving disability insurance benefits (13%). Few (13%) were employed at time of registration. Men and women were similar in their rates of unemployment at time of registration, except that women were more likely to be classified as homemakers than unemployed, while men were more likely to be classified as self-employed or unemployed. Roughly 79 percent of individuals served were essentially not gainfully employed when they registered.

Age Levels

Women tended to become rehabilitation clients at an older age than did men. There were fewer in the age ranges 16-24 (40 versus 44%), but more in the age ranges 45-54 (12 versus 10%) and 55-64 (6 versus 5%). Overall, the rehabilitation population is becoming older, with fewer cases occurring in the 16-24 year age group; a pattern similar to that found among all applicants to the program.

Marital Status and Head of Household

There were clear differences between women and men in marital status and roles as heads of household. Far fewer women were married (21 versus 33%) or never married (48 versus 54%). Far more were in the categories widowed (6 versus 1%), divorced (18 versus 8%) or separated (7 versus 3%). Fewer women were heads of households (33 versus 42%). In the general rehabilitation population, the percentages of divorced clients has increased and the percentage never married has declined.

Ethnicity

There were no significant differences either between men and women or across fiscal years in terms of the primary ethnic groups: Whites comprise 83 percent, Blacks 15 percent, and Others less than 2 percent. There were 1.3 percent women with Spanish surnames compared with 1.7 percent of men.

Educational Levels

Women served by the program had attained somewhat higher education levels than men. There were fewer women in the grade levels 8-11 (28 versus 31%) and more who had completed grade 12 (37 versus 34%) or had completed some college. Overall, clients are attaining higher educational levels in recent years.

Table 3
Characteristics of Individuals Served in Rehabilitation 1972 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=156)	Men (n=78)	Women (n=78)
Age Levels [d]						
16 - 24	.000	.000	NS	42.1	43.9	40.3
25 - 34	NS	.000	NS	23.7	...	...
35 - 44	NS	.000	NS	14.6	...	...
45 - 54	.000	NS	NS	10.7	9.9	11.5
55 - 64	.000	NS	NS	5.1	4.7	5.6
Ethnicity						
White	NS	NS	NS	83.4	...	...
Black	NS	NS	NS	14.6	...	...
Other	NS	NS	NS	1.2	...	...
Spanish Surname	.003	NS	NS	1.4	1.7	1.3
Marital Status						
Married	.000	NS	NS	26.9	32.6	21.2
Widowed	.000	NS	NS	3.4	1.0	6.0
Divorced	.000	.000	NS	12.9	8.4	17.5
Separated	.000	NS	NS	5.3	3.3	7.3
Never Married	.000	.025	NS	51.1	54.4	47.8
Unknown	NS	.000	NS	0.0	0.0	0.0
Head of Household	.000	NS	NS	37.3	41.9	32.8
Educational Levels						
8 - 11	.000	.000	NS	29.7	31.2	28.3
12	.000	.000	NS	35.6	34.0	37.4
13 - 15	NS	.000	NS	9.9	...	...
16 and over	NS	.000	NS	3.0	...	...
Severity of Disability						
Severely Disabled	NS	.000	NS	42.4	...	...
Public Assistance at Application	.000	.015	NS	21.2	17.5	25.1

Table 3 (Con't.)
Characteristics of Individuals Served in Rehabilitation
1972 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=156)	Men (n=78)	Women (n=78)
SSDI/SSI at Application	NS	.000	NS	13.3	...	...
Referral Source						
Individuals, Private Org.	.044	.000	NS	35.4	34.5	36.4
Hospitals	NS	NS	NS	19.7	...	...
Public Org.	.000	NS	NS	17.6	20.8	14.4
Welfare	.000	.000	NS	8.2	6.9	9.5
Education	NS	.031	NS	18.8	...	...
Work Status at Referral						
Competitive	NS	NS	NS	12.6	...	...
Sheltered	.003	NS	NS	1.0	0.9	1.2
Self Employed/BEP	.000	NS	NS	0.6	0.9	0.4
Homemaker	.000	NS	NS	4.7	0.8	8.8
Not Working	.000	NS	NS	78.9	82.3	75.6
Income at Referral						
Unadjusted	.050	.016	NS	1326	1394	1259
Adjusted for Poverty Level	NS	.000	NS	-4049	...	...
Previous Closure	NS	NS	NS	10.6	...	...

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[a] Analyses of variance results are only abstracted here. Full details of the analyses are presented in Appendix D.

[b] Degrees of freedom in each analysis were as follows: Gender, 1; FY, 12; Gender by FY, 12; and Error, 131.

[c] State-level averages for continuous variables and percentages for categorical variables (computed for each sample of 500 randomly selected cases for each fiscal year and each state) were the observational units in the analyses.

[d] NS is entered when p-levels exceed .05. When no differences were found for Gender, only the average across the 156 observations is displayed.

Referral Sources

Compared to men, higher percentages of women accepted for services were referred by individuals and private organizations (36 versus 35%) and welfare organizations (10 versus 7%). A lower percentage were referred by other public organizations (14 versus 21%). The percentage of referrals from individual and private organizations has been increasing, while the percentage of referrals from welfare sources has been declining.

SSI/SSDI at Registration

Approximately 13 percent of individuals served were receiving SSI/SSDI benefits at registration. This rate has been variable over the period of years, beginning at about 6 percent in 1972-1973, rising to 17 percent during 1979-1982 and then dropping back below 12 percent in 1984.

Public Assistance at Registration

The percentage of women receiving public assistance at registration was notably higher than for men (25 versus 18%). The percents of all individuals on public assistance have increased steadily from 14 percent in 1972 to a high of 23 percent in 1975 and held fairly steady at 22 percent since 1982.

Work Status at Registration

Few individuals were employed when referred to vocational rehabilitation. The percentage for women was about equal to that for men (12 versus 13%). The major difference between gender was the higher percentage of women who were classified as homemaker (9 versus less than 1%). If the women had been classified not working rather than homemaker, it appears that distributions of cases for genders would have been very similar.

Income at Registration

At registration, unadjusted total income for women was significantly lower than for men ($1259 versus $1394). However, when income was adjusted for poverty, differences between men and women disappeared. Both were notably below the poverty line at point of registration: -$4049. For all clients, average income at registration has increased from approximately $1065 in 1972-73 to $1452 in 1983-84. The real value of income at registration has, however, declined for the period 1975 to 1984 (years for which comparable poverty data were available): In 1975-76, the average total income at registration adjusted for poverty was -$2812, while in 1983-84 the adjusted total income at registration was -$5753.

Severity of Disability

Approximately 45 percent of individuals accepted for services were severely disabled. This remained essentially the same for both genders over the 13 year period of time.

Service Provision

Table 4 summarizes the results of the analyses of variances conducted with the service provision variables. In general there were few differences noted in terms of the services provided to men and women between 1972 and 1984. While there have been some notable increases in expenditures for services over the period, these have been relatively consistent for men and women. More women go to college or business school and receive services to family members. A slightly higher percentage of women also receive vocational adjustment services. More men attend vocational schools. A surprisingly high percentage of women receive "other" services. Given that there is also a greater tendency for women to go to business school and for men to go to vocational school, taken together, these results may indicate different patterns of services for men and women.

Pattern of Services Used

The average number of services provided to men and women has increased from 2.2 in 1972 to 2.6 in 1983-1984. Likewise, there has been a gradual increase in percentages receiving diagnostic services for both genders from 90 to 93 percent and an increase in the percent of individuals requiring other services, from 28 to 48 percent. The percents of persons sent to college or sent to vocational school has been declining for this same period of time.

Approximately 25 percent receive restoration services during rehabilitation, three percent received other academic training and approximately five percent received on-the-job training. On the average, 13 percent of all individuals received some type of miscellaneous service and 21 percent received maintenance services or funds for maintenance. Approximately three percent of all individuals are referred for extended evaluation.

Somewhat more women (13 versus 12%) attended college, perhaps because a higher proportion of women in vocational rehabilitation services are often older and may have had the opportunity to develop clearer plans which may require college training. Across the years studied, a higher percent of women than men have attended business school (4 versus 2%). The fact that the percentages of men and women attending business schools has decreased over the years may be because clerical programs are now offered in vocational schools and may not be the result of any profound change in attitudes towards vocational roles for women. Even within business school training, men go into different, and better paying, areas of training than women (e.g, accounting versus general clerical).

The percent of men attending vocational schools has consistently been higher than for women (14 versus 12%). Again, the fact that more men than women attend vocational school may be due, in part, to stereotypical thinking about appropriate vocational roles for men and women. Although vocational schools now offer more non-traditional and non-gender specific programs for women, more courses offered are in traditionally male-dominated occupations.

Table 4
Provision of Rehabilitation Services
1972 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b] Gender	FY	Gender by FY	State-Level Averages [c] Across (N=156)	Men (n=78)	Women (n=78)
Services Utilized [d]						
Diagnostic	NS	.042	NS	90.2	...	...
Restoration	NS	NS	NS	24.2	...	...
College	.001	.015	NS	12.4	11.8	13.2
Other Academic	NS	NS	NS	3.1	...	...
Business School	.000	.009	NS	3.0	1.8	4.2
Vocational/Technical	.016	NS	NS	13.2	14.0	12.4
On Job Training	NS	NS	NS	4.8	...	...
Vocational Adjustment	.024	NS	NS	22.1	21.2	23.1
Miscellaneous	NS	NS	NS	13.1	...	...
Maintenance	NS	NS	NS	21.4	...	...
Other	NS	.000	NS	40.1	...	...
Services to Family	.042	NS	NS	1.2	1.2	1.4
Sent to Extended Evaluation (06)	NS	.001	NS	2.9	...	...
Service Resource Indicators						
Number Services Rec'd	NS	.000	NS	2.4	...	...
Average Dollars Spent	NS	.000	NS	$1098	...	...
Average Dollars For Facility Services	NS	.003	NS	$ 385	...	...
Percent Case Services Dollars For Facility Services	NS	NS	NS	25.3	...	...
Measures of Movement Through System						
Months to Acceptance	NS	NS	NS	5.5	...	...
Months in Services	NS	NS	NS	20.3	...	...
Total Months in Rehabilitation	NS	NS	NS	25.8	...	...

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[a] Analyses of variance results are only abstracted here. Full details of the analyses are presented in Appendix E.

[b] Degrees of freedom in each analysis were as follows: Gender, 1; FY, 12; Gender by FY, 12; and Error, 131.

[c] State-level averages for continuous variables and percentages for categorical variables (computed for each sample of 500 randomly selected cases for each fiscal year and each state) were the observational units in the analyses.

[d] NS is entered when p-levels exceed .05. When no differences were found for Gender, only the average across the 156 observations is displayed.

Slightly higher percentages of women received vocational adjustment services (23 versus 21%) and services for other family members (1.4 versus 1.2%).

Dollars Spent on Rehabilitation

The average costs for all services has risen from $742 in 1972-1973 to $1283 in 1983-1984, an increase of over 70 percent, for both men and women. The average cost for facility based services costs has risen from $249 in 1972-1973 to $509 in 1983-1984, an increase of over 104 percent, but the ratio of total case service dollars spent on facility services has remained at 25.3% for both men and women. However, the percentage increase in dollars spent for services has not matched the increase in the consumer price index. According to data provided to the study group by the Department of Labor, Bureau of Statistics, the national consumer price index increased 134 percent for the same period.

Movement through Rehabilitation

The typical individual spent approximately 5.6 months between registration and acceptance (statuses 02 and 10), 20.3 months in service statuses, and approximately 26 months between registration and closure, regardless of gender. These averages have not changed substantially over the 13 years.

Outcomes and Impacts of Rehabilitation

Table 5 summarizes the analyses of equity in outcomes and impacts of the rehabilitation process. Since 1972 the percent of men and women successfully rehabilitated has steadily declined (78 to 61%), coupled with a slight decline in the percent of those successfully rehabilitated who enter competitive employment. Women continue to have a slightly better likelihood of being closed rehabilitated (67 versus 63%), but while the spread between men and women has narrowed since the late 1970s, men are 10 percent more likely to be competitively employed at closure than women; women being closed as "homemakers" still account for 15 percent of all successful closures among women. Occupations into which men and women enter appear to be largely gender-traditional. Most alarming, women clearly benefit less, economically, from vocational rehabilitation than do men. While both enter the rehabilitation process with total income resources substantially below the poverty level, the unadjusted income of successfully rehabilitated, competitively placed women was 67 percent of the income for similar men and their adjusted income was still below the poverty level. At registration for services and at closure, more women qualify for public assistance.

Closure Rates

The rehabilitation rate (number of 26s divided by numbers of 26s, 28s and 30s) has generally declined over the period from about 78 percent in 1972-1973 to 61 percent in 1983-1984. While the rehabilitation rates have

Table 5
Outcomes and Impacts of Vocational Rehabilitation
1972 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=156)	Men (n=78)	Women (n=78)
Measures of Program Success [d]						
Rehabilitation Rate	.001	.000	NS	65.2	63.2	67.4
Not Rehabilitated - Served (28)	.012	.000	NS	24.2	25.5	23.1
Not Rehabilitated - Not Served (30)	.022	NS	NS	10.4	11.3	9.5
Reason Not Rehabilitated						
Cannot Locate	.000	.000	NS	8.5	9.3	7.7
Too Severe	NS	NS	NS	3.9	...	...
Refused Services	NS	.000	NS	13.4	...	...
Death	.000	NS	NS	1.0	1.2	0.8
Institutionalized	.000	NS	NS	0.9	1.4	0.5
Transferred	NS	NS	NS	0.4	...	...
Other	NS	.000	NS	0.4	...	...
Work Status at Closure						
Competitive	.000	.000	NS	48.5	52.5	44.6
Sheltered	.016	NS	NS	5.5	4.9	6.3
Self Employed/BEP Business Enterprise Program	.006	NS	NS	2.1	2.5	1.8
Homemaker/Unpaid famly	.000	NS	NS	9.0	3.3	14.8
Not Working	NS	.000	NS	3.3	...	...
Other, Unknown	.005	.000	NS	30.0	31.7	28.3
Occupation at Closure						
Professional, Technical	.002	.000	NS	43.5	45.5	41.5
Clerical, Sales	.000	.000	NS	10.7	6.9	14.6
Service	.000	.000	NS	13.0	10.9	15.3
Agriculture	.000	NS	NS	NA	NA	NA
Processing	.000	NS	NS	10.3	5.7	15.1
Machine	.000	NS	NS	7.4	9.6	5.4
Structural	.000	.000	.000	3.8	7.1	0.6
Miscellaneous	.000	.000	.000	4.3	7.0	1.8

Table 5 (Con't.)
Outcomes and Impacts of Vocational Rehabilitation
1972 to 1984 [a]

VARIABLES SUBMITTED TO ANALYSIS	p-Values for ANOVAs [b]			State-Level Averages [c]		
	Gender	FY	Gender by FY	Across (N=156)	Men (n=78)	Women (n=78)
Income (Unadjusted)						
At Referral	.050	.016	NS	$1326	1394	1259
At Closure	.000	.000	NS	$6013	7212	4814
Income (Adjusted for Poverty)						
At Referral	NS	.000	NS	-$4049	...	...
At Closure	.000	.000	NS	$ 246	1432	-938
Public Assistance						
At Referral	.000	.015	NS	21.2	17.5	25.1
At Closure	.000	.001	NS	15.6	12.0	19.3

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[a] Analyses of variance results are only abstracted here. Full details of the analyses are presented in Appendix F.

[b] Degrees of freedom in each analysis were as follows: Gender, 1; FY, 12; Gender by FY, 12; and Error, 131.

[c] State-level averages for continuous variables and percentages for categorical variables (computed for each sample of 500 randomly selected cases for each fiscal year and each state) were the observational units in the analyses.

[d] NS is entered when p-levels exceed .05. When no differences were found, only the average across the 156 observations is displayed.

shown an increase since 1982, that rate was still not at the level reported in the early 1970s. Further, a consistently higher percent of women than men were rehabilitated throughout the thirteen year period (67 versus 63%). Over the period, there was a significant increase in the percent of cases "closed after services were provided," a category more likely to include men.

Work Status at Closure

Fifty-three percent of men were employed competitively over this time span, as compared with 45 percent of women. Unadjusted for changes in overall rehabilitation rates, percentages of competitive placement declined from 58 percent in 1972-1973 to 43 percent in 1983-1984. Among individuals successfully rehabilitated, this change reflects a modest shift from 75 to 71 percent competitive placements for the same period (once rates were adjusted for proportions closed 26).

Prior to 1975, the percent of men competitively placed exceeded that for women by about 12 percent. From 1975 through 1980, men exceeded women by about 10 percent. Between 1981 and 1984 that difference in percent dropped to under six percent. During the entire period the percentage of persons closed into competitive employment has decreased for both genders.

Significant gender differences were found for closures into sheltered employment, self-employed or business-enterprise, and homemaker classifications: More women were closed in sheltered employment than men (7 versus 5%), fewer women were closed in their own small business than men (2 versus 3%), but more women were closed as homemakers (nearly 15% of all women successfully rehabilitated were closed in the non-paying occupation of homemaker, compared with 3% for men).

Occupations at Closure

The types of occupations into which individuals were closed continued to show significant differences by gender over time in the areas of professional-technical-managerial occupations, clerical and sales occupations, miscellaneous occupations, and structural occupations. There was a small but consistently higher percentage of men in the professional-technical-managerial occupations (46 versus 42%). The percentage of closed cases in these occupations has increased notably over the 13 year period. Approximately twice the percent of women (15 versus 7%) enter the clerical-sales occupations traditionally occupied by women. Changes have occurred from year to year, but no specific trend can be identified among closures into the service occupations. Women out-rank men in the service occupations (15 versus 11%) and though there were small declines in percentages of persons entering this occupational category since the 1970s, the percents for women have remained relatively constant since 1976.

In the traditionally male-dominated structural occupations there was an expectedly low participation rate by both genders, but especially for women. About 7 percent of men have been closed in this occupation over the 13 year time period. The steadily declining percentage of women in this occupational category has consistently remained at less than one percent. In miscellaneous occupations, there has also been a consistent downward trend. However, men continue to dominate this category (7 versus 2%).

Impact on Income

The difference between unadjusted annual income at closure for men and women favored men across the years. The $4814 annual average total reported income (wages and public assistance) for women was 67% of the $7212 annual average reported earnings for men. When total annual income at registration for both genders is compared with income at closure, it is apparent that participation in the vocational rehabilitation system increases the men's earning potential far more than women's earning potential, even though both enter the system at about the same income level. Likewise, when income at closure are adjusted for poverty (defined as income needed for basic human needs given the number of dependents), men benefit more than women. At registration, men and women report a similarly grim economic situation with adjusted income of about -$4000. At closure, among those competitively employed, men have achieved a positive, though small advantage in income above the poverty level, $1432, whereas women still experience a negative income level, -$938. These patterns hold across time.

Impact on Public Assistance

A higher percent of women were receiving public assistance at registration and at closure. Further, the overall percents of individuals on public assistance at registration have risen from 15 to 22 percent and at closure from 10 to 16 percent. Though there was an overall decrease in the percentage of individuals receiving public assistance from registration to closure of about six percent, about 19 percent of women still qualify for and receive public assistance at closure as compared with 12 percent of men.

Reasons for Not Being Rehabilitated

The data for reasons not rehabilitated were not conclusive. It appears that about 12 to 14 percent of individuals not rehabilitated are closed because they "refused services." While these percentages have increased considerably over the years, no gender differences were evident. Similarly, while there were yearly differences for the unsuccessful closure reason given as "can't locate," the percents were comparable for men and women.

V. ISSUES AND RECOMMENDATIONS

The Region V study of gender equity focused on determining whether and to what degree there were differences in characteristics and acceptance rates, in service patterns, and in outcomes and impacts of the Vocational Rehabilitation program in the Region. The results indicate a serious problem of inequity in the impacts of the vocational rehabilitation program on men and women with disabilities. The research clearly demonstrated that women with disabilities did not acquire financial resources and occupational success at the conclusion of rehabilitation comparable to those achieved by men.

The research raised very direct issues regarding what is occurring and helps to narrow attention to areas in which significant change in policy, procedure, and practice in rehabilitation programs can be implemented to help resolve the problem of differential treatment of men and women with disabilities. That these inequities mirror the mores and beliefs which society holds regarding the traditional place and role of men and women in the labor force cannot of course be considered a caveat for dismissing the importance of these findings. The cumulative findings from research to date should not be considered so lightly.

In this section of the report the Policy Study Group summarizes issues that are raised by the research and documents the rationale which led to proposing those issues. A number of concrete recommendations are offered for policy, practice, research, and training which should be effective for correcting the problem. Recommendations and issues are offered in the areas of outcomes of rehabilitation, inputs to the rehabilitation system, rehabilitation processes, and broader systemic areas which are likely contributors to the basic problem of gender inequity found in vocational rehabilitation.

Outcome Issues and Recommendations

Issues:

A. After vocational rehabilitation services, women rehabilitants in Region V earned less than men and had a greater probability of remaining below the poverty level. The 13 year data indicated that at closure women achieved less financial independence and maintained greater reliance on public assistance than men. This was true even though the financial resources available at the initial point of contact with the system were similar for men and women.

B. Over the 13 year period the Region V vocational rehabilitation system perpetuated the limiting effects of gender-role occupational stereotyping for women.

Rationale:

There are clear and obvious inequities in the impact of the rehabilitation program on the occupational attainments and economic gains for women. The data revealed that men and women came to the vocational rehabilitation system with comparable earnings, but during the rehabilitation process the disparity that first began at acceptance became pronounced at closure. Participation in the vocational rehabilitation system impacted men's earning potential more than it did women's earning potential and thus their potential for economic self-sufficiency. These findings perhaps argue for pursuing a higher goal for people with disabilities than we are now pursuing; a goal to prepare them for placement into occupations with career and earnings growth potential, rather than continued, heavy reliance on marginal, entry level occupations.

While neither gender could claim great victories in terms of movement toward financial independence, reported annual earnings at closure illustrated the fact that men earned more and that those earnings better enabled them to avoid poverty. At the time of application, no difference existed between earnings of men and women; both had earnings about $4000 below the poverty level. At acceptance into the rehabilitation system, reported earnings favored men by about $100 per year, but both continued to be below the poverty level. When successfully rehabilitated individuals exited the system, the disparity in income became considerable. Women's earnings were 67 percent of the reported earnings for men. While men's earnings put them about $1500 above the poverty level, comparable earnings for women were about $1000 below the poverty level. Predictably, a higher percent (20%) of women received public assistance at closure.

While the gap between successfully rehabilitated men and women narrowed over the study period, more women continued to be successfully rehabilitated. It was also evident that more women than men were closed into low-paying or non-paying occupations. With the exception of the gradual rise in percents of women attaining employment in the professional-technical-managerial occupations, the majority of occupational choices open to women continued to remain in the traditional ones: clerical, sales, and service. Few women appear to have crossed the boundary into jobs traditionally dominated by men.

Among all closures in rehabilitation, there were 9.4 percent fewer women closed into competitive employment than men. Higher percents of women were closed into the non-paying homemaker classification (15 versus 3%) or closed into sheltered employment (6.5 versus 4.9%) and women were less likely to start their own small businesses (2.5 versus 1.8%). The types of occupations into which individuals were closed showed significant differences by gender over time. There was a small but higher percent of men closed in the professional-technical-managerial occupations (45.5 versus 41.5%). Twice the percent of men were closed in service occupations (14.6 versus 6.9%). Women were more prevalent in the clerical-sales occupations traditionally held by women (15.3 versus 10.9%). Women comprised less than 1 percent compared to 7.1 percent of men closed in the structural occupations, historically dominated by men, though closures in this category were found to have declined over time.

The present findings corroborate the occupational segregation Bowe (1984) found for women with disabilities in the general labor force. His research findings parallel the finding of segregated placement of women in general in the American work place. According to Census Bureau figures (U.S. Department of Commerce, 1987), the top four occupations for women 18 years and older are secretaries, bookkeeper-accountants, managers/administrators, and general office clerks. For men the top four are managers/administrators, manufacturing supervisors, heavy truck drivers, and wholesale/retail owners. The top four occupations of women aged 35-44 with five or more years of college are elementary school teachers (average annual earnings, $16,100), managers and administrators, registered nurses and secondary school teachers; for men they are managers and administrators, lawyers, physicians, and post-secondary school teachers (average annual earnings, $40,000).

There are four likely, major consequences of occupation segregation if rehabilitation continues its current approaches to serving women. The first major consequence is that of economic dependence on another's source of earnings or on public assistance. The non-income status of the homemaker most clearly points to this. The availability of homemaker status as a closure option at both application and closure may indicate a system-based gender-bias or an implicit acceptance of non-income goals for some individuals; a goal which also then accepts economic dependence as appropriate.

The difficulty experienced by many women with disabilities in achieving financial independence through their occupational earnings constitutes the second major consequence. Occupations dominated by women have lower average earnings and are less likely to provide important fringe benefits such as health insurance and retirement benefits. Encouragement of women to pursue occupational goals in entry-level or societally prescribed women's occupations may mean both continued lack of parity in income and continued dependence on public assistance supplements.

The third consequence of occupational segregation is restricted opportunities for women with disabilities to attempt non-traditional jobs for which they have the required functional capacities. The denial of these options may mean the difference between success and failure in an employment attempt and a narrowing of career possibilities for women to occupations with limited growth potential.

The fourth follows from the effect that occupational segregation has directly on women with disabilities. Segregation of women with disabilities into traditional, low-paying occupations serves to: (a) reinforce their acceptance of the stereotype that they are less capable of taking care of themselves, and (b) reinforce their self-concept, both as women and as individuals with disabilities, as less-than-valued, often precipitated by long-range dependency on others. Low wages and inadequate fringe benefits can discourage even the most motivated job seeker from leaving the relative security provided through Social Security benefits or public assistance.

Recommendations:

Service needs of women with disabilities

State Vocational Rehabilitation agencies should examine their policies regarding provision of non-traditional combinations of ancillary services. The degree of flexibility with which rehabilitation agencies provide services which meet the unique needs of women with disabilities may profoundly affect the quality of vocational outcomes. Much consideration should be given to the provision of services which can support the successful outcome of cases involving women. Child care, transportation, maintenance and other ancillary services are apt to be important to women with disabilities. Standards for the provision of ancillary services should be reviewed for their relevance to need and consistency in provision. While fiscal restraints are a constant reality, ancillary services should not be the first expenditures to be cut.

Standards and criteria for success

State programs should establish meaningful standards and criteria for program access and successful closures. These should be incorporated into state plans and tied to program goals, training, and evaluation. The plan should include the following: (a) an alternative classification system for categorizing successful closures, (b) revised performance expectations for the rehabilitation program, and (c) timelines for achieving equity in service provision. An alternate classification system could include four types of successful outcomes: Competitive, sheltered, self-employed and homemaker, or unpaid family worker. Revised expectations for program performance should set targets for incidence of: (a) acceptances of men and women, (b) closures into competitive employment, (c) closures into competitive employment with earnings above the poverty level, and (d) closures into competitive employment into occupations with career potential.

Review of homemaker closures

The use of "homemaker" as a closure option may be inconsistently applied from state to state, and may lead to systematic gender inequities. It is recommended that State Agency Management Reviews be conducted within Region V to clarify the conditions under which this form of closure is being used appropriately on behalf of women's needs. Findings and recommendations evolving from that effort should then be shared nationally to improve the appropriate use of this closure category on behalf of women and in terms of Title I funding and program performance goals.

Input Issues and Recommendations

Issues:

C. Vocational rehabilitation programs have not formalized systematic approaches to address the vocational experiences and characteristics of women.

D. Younger women are under-represented in the Region V vocational rehabilitation system. The 13 year data indicates that the referral process that encourages referrals of young men seems to be increasingly ineffective in fostering referrals of young women.

Rationale:

The vocational rehabilitation program is not adequately reaching a segment of women in the population. It is under-accepting women ages 16-24. The study indicated that young women did not enter the program at a rate comparable to that of young men. The profile of older women who did enter the program differed significantly from their male counterparts. Older women had a higher educational level, received public assistance and were either widowed, separated or divorced. They were also likely to be referred to the program by educational institutions, public welfare agencies, private organizations or to have initiated the contact themselves. They may have been seeking employment opportunities or economic gains in conjunction with change in their marital status. Returning to work after an extended period of time requires that the rehabilitation program address issues such as: (a) financial dependency on the welfare system, (b) lack of prior or current vocational experiences, (c) the psychological implications of family circumstances that require unexpected entry into the work force, and (d) the need for marketable skills.

The results revealed that referrals of both men and women from welfare and public organization declined, while referrals from individual and private organizations have increased. The referral sources which predominantly referred women to vocational rehabilitation were private organizations, hospitals, and educational institutions. Men were referred from private organizations, public organizations, and hospitals. The gender differences found for education referrals may be related to both a higher drop-out rate for men and greater importance placed on vocational planning for men by school personnel.

A higher percentage of women 45 years and older came into rehabilitation (17.1 versus 14.6%). This compares with men, who tended to apply at an earlier age, between the ages of 16-34 (68.1 versus 63.5%). A question should be asked as to why older women who are faced with a need for employment options seek assistance from vocational rehabilitation, when over one-half of the women have graduated from high school or have received some post-secondary training. Women with disabilities who have not experienced or have only recently experienced paid work, even though they may be qualified, may be encountering barriers including: (a) the psychological barrier to herceiving their own employment as their sole source of financial support, and (b) the reality of needing to be a head of household.

At the time of acceptance for rehabilitation men typically were single (54.4 versus 47.8%) or married (32.6 versus 21.2%), while women were more likely to be divorced, widowed, or separated (30.8 versus 12.7%). There were six widowed women to each widowed man. The divorce rate among program applicants paralleled the divorce trend in society. A significant percent of women with disabilities were divorced and twice as many women with disabilities as men were likely to be separated.

Evidence of different patterns of marital status between the genders suggest that women are less likely to come to vocational rehabilitation for services until such time as their marital or economic status have changed. Women with disabilities may be sheltered from the work force by husbands or family members. A higher percent of women came into the system receiving public assistance (25.1 versus 17.5%).

Recommendations:

Public image

State agencies should determine whether they are perceived as accessible and effective with women by their principal publics. These publics include legislators, citizenry (especially women with disabilities), former clients, referral sources, other human service organizations, and employers. The agencies should review and evaluate their media efforts to identify and eliminate sexist language and stereotyping in advertising, manuals, and information packets. Public relations plans should be developed and implemented which correct inaccurate perceptions of vocational rehabilitation and which depict women in non-sex stereotyped terms in brochures, annual reports, and news releases. It is also suggested that current staff recruiting and personnel practices need to be reviewed to determine whether those practices negatively impact upon women and the disabled women served by rehabilitation.

Relationships with principal referral sources

Vocational Rehabilitation agencies should conduct a systematic examination of current and potential sources for attracting women to the vocational rehabilitation program. This may require modifying working relationships with existing referral sources and development of understandings with new referral sources of what constitutes appropriate referral to rehabilitation programs. The image and message the Vocational Rehabilitation agencies need to project should emphasize: (a) vocational rehabilitation effectiveness, (b) need for early mutual intervention with women with disabilities, (c) mutual collaboration in the formulation of vocational solutions, (d) providing referred women with an understanding of the importance of prevocational skills and skill acquisition, and (e) establishing joint responsibilities in successfully completing a planned vocational rehabilitation.

School to work transition

State agencies should develop programs for students with disabilities, especially women, that would accomplish the federal initiative to improve the transition from school to work. This collaborative effort with schools would integrate vocational rehabilitation counseling into the development of the vocational portion of the student's education plan and should increase the referral of younger women to the program. State agencies should develop and implement efforts with schools to provide opportunities for women students to explore and participate in non-traditional vocations. Such programs should break down sexual stereotypes by (a) providing role models of women in non-traditional occupations, (b) creating an awareness in young women of the need to plan for their own economic and vocational future, (c) emphasizing the economic aspects of vocational choice, and (d) emphasizing non-traditional occupations for women. The results of such collaboration would be: (a) an enhanced vocational plan, (b) an educational plan that focuses on both vocational preparation and the independent living skills needed to support the student's vocational plan, (c) a student better prepared to make informed vocational and career decisions, and (d) timely and appropriate referral to a rehabilitation program.

Process Issues and Recommendations

Issues:

E. The joint development of the rehabilitation plan may be adversely influenced by the stereotypes and attitudes about women, men, and work that state agency personnel and clients bring to this planning process.

F. Although women enter the system with a higher level of education and are more likely to be sponsored in post secondary training their pattern of services does not yield earnings outcomes that are comparable to the earnings of men.

Rationale:

Women with disabilities may be suffering from occupational segregation reinforced by the occupational skill training they receive. The decisions women make about their employment options are influenced by experiences they have had throughout their socialization and education. Previous literature (Atkins, 1982; Gilbert, 1983; Holcomb, 1984; Vash, 1982) suggests that the answers may lie with the decision-making processes that produces the vocational goal. If vocational guidance is provided for the purpose of greater employment achievement, the results should be more similar for men and women. The data indicates substantially different patterns of services and inequities in outcomes and benefits in terms of financial gains from vocational rehabilitation for women.

Women and men were provided dissimilar vocational rehabilitation services, in the degree to which vocational skill training, work adjustment training, and services to family members were provided. The following services were similar: (a) women and men did not differ significantly with respect to the average dollars spent ($1092 for men, $1105 for women), (b) average months in service status were the same (20.3 months), and (c) the average number of services provided were the same (2.45 for men and 2.52 for women).

In regard to skill training, four statistically significant differences were evident: (a) more women were provided business school training (4.2 versus 1.8% for men), (b) slightly more women were provided college training (13.2 versus 11.8% for men), (c) men were provided vocational school training more often (14.0 versus 12.4% for women), and (d) significantly more women were provided vocational adjustment than men (23.1 versus 21.1% for men). Women received slightly more services to family members than men (1.45 versus 1.2% for men). Although this study did not include the number of dependents, in the general population more than one in seven families is headed by a woman (U.S. News & World Report, 1982). It may be hypothesized that women are more likely to need child care services than men.

The importance of education to employment status for women has been demonstrated in several studies. In reviewing literature on the link between education and employment, the League of Women Voters Educational Fund (Reder, et al., 1984) found documentation of gender stereotyping and segregation in the education of women which led to low-wage occupations. The March 1981 Current Population Study data showed that the more education women had, the greater the likelihood was that they would be in paid employment. Women in the labor force were twice as likely to be college graduates as women who were not. The American Council of Life Insurance (1983) found that 81 percent of all working women are high school graduates and 17 percent of all working women are college graduates.

National employment patterns for women in the early 1970s indicated that 25 percent of all employed women were in only five occupations: elementary school teacher, typist, waitress, sales, and clerical and secretarial (Waldman & McEaddy, 1974). Census statistics from 1981 and 1982 show that the greatest number of women continue to be employed in clerical, teaching, retail sales, and service jobs (U.S. Department of Labor, 1983). These employment patterns lead to income differentiation. By 1983, women were earning 64 percent of the income men were earning (Spain, 1985).

The importance of education to employment status is even more important for women with disabilities. Of women with disabilities, only 50.7 percent have a high school education or better (compared to 74.8 percent for women without disabilities) and 17.4 percent have less than eight years of education. In a recent study of the educational system, Asch (1984) found that "girls and boys with the same disabilities often receive different kinds of education." In addition, schools and families had lower expectations for women with disabilities and made the assumption that women with disabilities would not work after completion of education (O'Toole & Weeks, 1978; Asch, 1984).

The literature suggests that "girls" with disabilities may be subject to low expectations and an absence of successful role models while in school. When many school counselors do career planning with disabled girls they find they work from a distinctly traditional mind set or devalued self-perception in regard to vocational achievement (Egelston & Kowolchuk, 1975). There may be depressing effects on women's aspirations during the high school years resulting from peer expectations, family protectiveness, and adolescent developmental stages of self-definition.

The vocational guidance provided by vocational rehabilitation counselors to women with disabilities can contribute to the selection of traditional vocational goals which in turn lead to occupational segregation. The quality and style of such vocational guidance may take many forms: (a) relatively passive acceptance of already formulated career goals, (b) guidance based on incomplete knowledge of new job markets, (c) active encouragement to stay in the "tried and true" job markets, and (d) empathy for individuals who seem not able to cope with another employment failure.

Recommendations:

Program policy and guidelines for practice

The state Vocational Rehabilitation agencies should conduct a comprehensive review of their policies, guidelines, and practices to achieve greater gender-equity. These reviews should identify and eliminate those items which are gender-biased and impact upon access to services, eligibility determination, goal selection, planning of services, and outcome. These reviews may also become the basis for developing performance standards for the incidence of women on caseloads and in closures.

Rehabilitation professional skill development

Efforts need to be initiated which will aid rehabilitation personnel to become more sensitive to the needs and problems women with disabilities face. Professional and inservice education entities need to develop and implement curricula and training programs which will emphasize awareness and sensitivity among rehabilitation staff to the characteristics and needs of women. Emphasis in curricula should contain the following: (a) psychology of work, (b) the psychological effects that being an older woman, single parent or displaced homemaker might have in returning to work after a change in marital status and/or a long absence from the labor force, (c) vocational development theories regarding women with disabilities, (d) awareness of non-traditional integrative approaches which meet the needs of both younger and older women in rehabilitation, and (e) systematic application of functional assessment to minimize gender stereotyping and gate-keeping practices.

Consumer education

The state Vocational Rehabilitation agencies should develop a consumer education process. The process should encourage full involvement by consumers in planning and directing their rehabilitation. The process should emphasize: (a) need to promote assertiveness of individuals in pursuing non-stereotyped occupations, (b) assistance in the development of images of themselves in vocations based on successful role models of women with disabilities, (c) income and fringe benefit information available for non-traditional, high-yield occupations, (d) encourage women to see themselves as their main income source, and (e) encourage women to obtain relevant support and counseling for their families.

Systemic Issues and Recommendations

Issues:

G. The vocational rehabilitation system has been used as a societal change agent to create opportunities and to open avenues for equity. The data from the study argues for acceptance of a responsibility for establishing the necessary outreach and intervention strategies that will assure appropriate and equitable access, services, and outcomes for women with disabilities.

Rationale:

This study adds to the growing body of evidence that the vocational rehabilitation system has inequities based on gender which are apparent in the numbers of women receiving services and in the outcomes achieved by disabled women. The Vocational Rehabilitation program operated in Region V does not currently ensure appropriate and equal outreach, access, services, and outcomes for women with disabilities. The question for the rehabilitation community in the region is "Do these results, in conjunction with previous research, offer sufficient evidence to warrant addressing the issues through systemic changes?"

Society's traditional mores and attitudes toward women, particularly those with disabilities may encourage a more protective approach. The viewpoint may be that women need not consider a career as necessary. No body of fact argues that such views are held by women with disabilities. If there were only a one or two percent difference between men and women in application, acceptance, closure rates and in their relative income levels, it might reasonably be argued that posing an issue of systemic inequity is an overstatement. When there are gender differences of the magnitude found in this research (when the incidence of gender is controlled), it must be accepted that the system is clearly not serving women equitably. Policy makers should act on these results and correct inequities.

There is substantial precedent for targeting legislation, policy, regulations, services, and resources toward persons perceived to be in need. The Carl Perkins Act provides strong language and guidelines to assure both equal access and likely gains for women, single parents, heads of household, and disabled persons through federally sponsored vocational education programs. The legislative history of the Vocational Rehabilitation program has been to target efforts toward special populations considered to be underserved, at risk, or in special need. The Vocational Rehabilitation Act has been expanded to include targeted service and research efforts to meet the needs of persons with mental disabilities, Native Americans, persons in need of independent living services, migrant workers, as well as the severely disabled.

Historically, vocational rehabilitation has intentionally changed when a clear mandate was expressed through public action or when a sufficient body of evidence accumulated surrounding an issue. There now appears to be such a body of evidence (Atkins, 1982; Harrison & Wayne, 1987; Perlman & Arneson, 1982), including this Region V study. The results show an advantage for men. They confirm that rehabilitation reflects what is going on in society. If vocational rehabilitation is to continue its tradition of assuring services to populations with special needs, it must again intentionally make significant systemic changes in its program, policy and practice and in its relationships with broader segments of society.

Recommendations:

Federal and state provisions for resolving inequity

The Rehabilitation Services Administration, the National Institute on Disability and Rehabilitation Research, and the Office of the Assistant Secretary for Special Education and Rehabilitation Services should initiate actions to accomplish the following: (a) coordinate policy to implement the gender-equity provisions of the Carl Perkins Act, (b) establish focused priorities for gender-equity concerns in long-term and short-term training grants, federally supported research grants and state plan targeted performance expectations for service provision to women receiving services under Titles I, VI, and VII of the Vocational Rehabilitation Act, and (c) modify the data collection system reporting requirements to more accurately understand gender-related issues and for program evaluation.

State rehabilitation agencies should initiate companion efforts to achieve the recommendations described above. Quality assurance units should be sensitized to the importance of disequity issues and design appropriate measures for the evaluation and identification of inequities in case work policy and practice.

Rehabilitation resources for obtaining solutions to problems of gender inequity

There are four principal vehicles within the rehabilitation community whose purposes are to support or conduct research studies, address program policy concerns, and to expand rehabilitation knowledge:

1. The Rehabilitation Services Administration's national data system contains indicators on all clients served by the state-federal Vocational Rehabilitation program. The data gathered through this system should include additional codes for full-time and part-time work and the value of fringe benefits received. With these kinds of data RSA could study issues such as differential economic gains for men and women whose employment includes fringe benefits and compare the equity of their earnings in comparable occupations.

2. The National Institute on Disability and Rehabilitation Research should review the Region V research, the findings of other research, and the ecommended areas for additional study. Based upon that review, priorities for research should be developed to solicit proposals to more fully determine the effects of gender-bias within the rehabilitation system.

3. The Congress through the Rehabilitation Act has established Research and Training Centers to address long-term issues and the needs of special populations such as head injury, blind, deaf, spinal cord injured, Native Americans, and Pacific Basin populations. A Research and Training Center should be designated with a core area to study and make recommendations regarding women with disabilities.

4. The Institute on Rehabilitation Issues addresses topics of significant concern to the rehabilitation profession. A training strategy is needed to address the effects of gender-bias among rehabilitation practitioners. A future round of issues should incorporate a focus on methods to eliminate gender-bias.

Professional basis for practice

The rehabilitation profession does not have a theoretical basis for the vocational guidance, counseling and rehabilitation of women with disabilities. It is recommended that the necessary research to develop such theories for practice be supported. That effort should address the following: (a) vocational decision-making of women, (b) assessment practices which focus on the functional capacities of women with disabilities, (c) counseling practices which optimize career choices for women, and (d) occupational development approaches which yield economic self-sufficiency for women.

Training needs of rehabilitation personnel

The state Vocational Rehabilitation agencies, in conjunction with pre-service and inservice training resources, should prepare training and staff development plans which will enable vocational rehabilitation personnel to provide meaningful vocational counseling and guidance to women. An effective plan should include the following considerations: (a) self-identification of gender-bias, (b) the economic effects of gender-bias, (c) the entry and re-entry problems of women pursuing careers, (d) pursuit of non-traditional vocational goals, (e) women's probable need to work in order to achieve self-sufficiency, (f) emphasis on decision-making in guidance, (g) use of current labor-market information, and (h) the importance of involving families in women's selection of non-traditional occupations.

External context for rehabilitation

Realizing that the practice of vocational rehabilitation does not occur in a vacuum, state agencies must educate those segments of the community which impact on the vocational development of women with disabilities. Legislators, employers, educators, and vendors need information which promotes a positive image of women with disabilities. Joint advocacy efforts with consumer and professional organizations concerned about women with disabilities should be encouraged.

Rehabilitation services purchased and provided by state agencies should be gender-neutral. Agreements between state agencies and providers of services should include non-discrimination and affirmative action provisos.

Because service providers may have developed their services and programs mirroring the gender stereotypes in the work force, it may also be necessary to develop joint training aimed at increasing their awareness of the needs of women with disabilities.

Research and policy studies

This research effort was limited to selected R-300 data for the period between 1972-1984. While the findings are significant and have led to positive recommendations for action by the profession, there remain questions for further study. The recommendations for further research are the following:

1. The state programs vary in their registration of persons seeking access to the rehabilitation system. This study did not address outcomes for all persons who may have sought access to the system but did not enter applicant status. A gender study should be conducted to examine the impacts of gate-keeping practices.

2. The decrease in referrals from welfare and education agencies and the decrease of younger women in the system should be investigated. The research should focus on the causes for non-referral or non-application.

3. With the recent emphasis on transitional programming, current data on referrals from educational agencies should be reviewed to determine if any changes in referral patterns have occurred. These findings might provide a measure of the effectiveness of the initiative on transition between schools and the vocational rehabilitation programs.

4. An analysis of comparable data should be conducted which excludes rehabilitated individuals with no reported earnings. The homemaker classification is a female dominated category, while unpaid family worker is male dominated. Further analyses could clarify the extent of differential gender effects on earnings.

5. The R-300 reporting system classifies jobs based on the Dictionary of Occupational Titles. A study should be conducted which identifies gender-specific earning differences across similar occupations to determine if there are doubly adverse impacts for women with disabilities.

6. A study should be conducted of successfully employed persons to review fringe benefits for men and women. The outcome of this research could demonstrate whether the gap in financial resources between employed men and women is even wider than found in the current research.

7. A study needs to be conducted to investigate the degree to which findings of inequities in earnings of men and women are confounded due to inclusion of persons in full and part-time employment statuses.

8. A study needs to be conducted to determine whether there are additional adverse effects of inequity among minority group members with disabilities. Research into multiple minority groups has only recently been initiated.

9. The earnings data in this study is based on earnings at closure. A longitudinal study could reveal both the long-term impact of vocational stereotyping and whether the gap between earnings by gender narrows.

10. A national initiative is needed to replicate key aspects of this study. Such an effort could verify whether the findings are limited to Region V or may be applied more broadly.

11. Finally, a follow-up study is needed to determine the impact of the Region V study on changes in policy and gender equity among the states. That study should occur within 3-5 years.

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APPENDICES

A. The Regional Research Model
B. Participating State Directors, Members of the Research Groups, and Peer Reviewers
C. Region V Closures Before Controlling for Gender
D. Characteristics of Applicants
E. Characteristics of Accepted Individuals
F. Service Provision
G. Outcomes and Impacts
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A. The Regional Research Model

The Region V study of gender equity was an experiment in inter-state collaboration. The experiment had as its hypothesis that the six states could more effectively and efficiently derive solutions to problems of common concern in rehabilitation by combining their technical resources. The idea for such a collaborative effort was conceived by the Region V program evaluators. The basic approach was to (a) identify a problem of regional concern, (b) design a multi-state approach to determining the extent of the problem, (c) draw together the necessary resources from the state programs, universities, and research centers and through the RSA Regional Office, (d) conduct the necessary research to isolate its foundation in practice, policy, and organizations, (e) identify alternatives for solving the problem at a regional and state level, and (f) promote adoption of recommendations by the individual state agencies and the Regional Office. The study of gender equity was merely the first issue with which to develop and test such a collaborative model.

In practice, this collaborative approach and regional research model developed simultaneously. Considerable structuring and involvement of many different groups and regional resources were required. Quite importantly, this research model is intended to achieve a research product which will help to guide change in program, policy, and practice relevant to an issue of regional concern. It relies on the expertise and efforts of people identified and selected for contribution through one or more of four groups: Coordinating Group, Technical Group, Policy Group, and Editorial Group. The following is an outline for the Regional Research Model [1]. Though the flow of the model is stated in the future tense, the following were the steps followed in Region V's application of the model in its study of gender equity.

Problem Identification

The origin for the problem may come from the state directors in response to a national initiative (e.g., on equity for women, minorities, and disability groups), as a result of a formal survey or from among the program evaluators themselves. Once the general problem has been determined, a selected group of persons from the region should be identified and meet for one or more days to fully consider and elaborate the concerns and potential issues underlying the problem. A second purpose would be to identify the most likely options or specific questions to be addressed. Leadership for the effort then would also have to come from someone at one of the state agencies capable of influencing state directors and of maintaining momentum for the effort. Potential consultants on research, policy, and program development should be identified at this stage. Quite likely, they will be needed to clarify the problems, help design methodologies, identify other resources, help to keep focus to the principal issues, and provide access to other research resources (computers, libraries, training personnel, data collection personnel, dissemination channels).

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[1] A predictable side benefit of these group efforts would be that the individuals are likely to establish lasting working relationships with other individuals in the several states. Such relationships and the competencies that often get shared, may also help to increase the general level of capability available to each of the several agencies.

Developing the Research Plan and Establishing Coordination

Once the problem and primary issues have been narrowed down, a small working Coordinating Group should be established. This group should represent the state agency programs, Regional Office, have one person who will provide all coordination of resources (fiscal and material), identified research consultants and facilitators who might be required to deal with the chosen problem. The size of the group should be small given the nature of their responsibilities, perhaps 4-8 persons.

The following would be accomplished by the group: (a) Clearly specify the questions to be addressed and objectives for the project, (b) establish a workable approach, (c) identify and solicit necessary resources, (d) establish time lines, (e) conduct the necessary publicity to obtain state involvement, and (f) identify all subsequent state technical support or consultancies that are needed. This plan should be reviewed and receive support and approval from the program evaluators and the state directors. During the actual research process this group would provide consistency, serve as an ongoing resource, and help monitor progress.

Implementation

Once the regional research effort has been established, much of the responsibility for implementation falls to one person in the Coordinating Group. This person may employ consultants to accomplish specific tasks during implementation and must have authority and responsibility to (a) obtain the fiscal resources from the several states to carry out the task, (b) establish contracts for analysis, travel, meetings, and consultants, (c) develop an operating plan for each state's responsibilities in the project, (d) arrange for states' commitment of personnel to the effort, (e) sponsor and facilitate tasks and activities of the individuals involved, and (f) monitor and insure completion of the project. The Coordinating Group would provide material and operational support, as needed.

The Research Process

Research Design

In the equity study, the general parameters and data necessary for doing the research were identified by the Coordinating Group. The basic sampling approach, research methodology and analytic approach were then designed by consultants serving on the group from the Research and Training Center at the University of Wisconsin-Stout and the Regional Continuing Education Program at Southern Illinois University. Later, the necessary data were extracted from R-300 data files and computer analyses conducted through the West Virginia Research and Training Center.

For other regional research projects, the design may also need to be established by a consultant, depending on the nature of the regional issue being addressed. It will be more likely that the design will be accurately implemented and that the study will be completed if that expertise is available throughout the process. In the equity study, the two consultants, in conjunction with the Coordinating Group, designed the group processes subsequently used and then served as facilitators for the group research efforts as well.

Data Acquisition

One member of the Coordinating Group should be responsible for obtaining the necessary data and establishing a plan of analysis that would be amenable to group activity. That plan may require the individual states to collect new data, to extract data from existing state sources or to review selected documents. The objective at this stage would be to assure consistency in quality and in the form of results with which the other groups would use. It is likely that this person would be a facilitator in the subsequent group activities.

Technical Group

A Technical Group would be drawn from the state rehabilitation programs, one from each program or agency. This group would be brought to a central location for two or more separate meetings (generally, on two separate occasions) to determine the extent of the problem and relevant parameters. The members of this group would be program evaluation or research staff from the state agencies. Prior to their first meeting, all preliminary computer analyses should be completed. Each meeting should be at least 2 days and should occur with an interval sufficient (e.g., 3 weeks) to allow for any additional analyses and for acquisition or production of materials. A working document, which accurately summarizes a regional perspective of the extent and probable causes of the issues, would be produced by the end of their meetings.

The meetings of this group should be highly structured, with specific tasks to be accomplished, because of the limited time available. This may require that considerable pre-meeting work will have to be done (e.g., detail planning, completing computer work, abstracting data or publications). One or more facilitators should be present with necessary technical and policy skills. These facilitators would set the tone, arrange for necessary material and informational resources prior to the meeting, and serve as quality control checks for the individual and group products. They would also be responsible for establishing and assisting small subgroups with specific portions of the analyses.

The individuals in the Technical Group would be expected to do analyses of data, write summaries from those analyses, and provide critique for the efforts of other members of the group. They would submit their (or subgroup) written analyses, interpretations, and critiques to the coordinator at the conclusion of the meetings. During the meeting, a likely format would involve (a) review of process and/or expected accomplishments, (b) work by task oriented subgroup on analysis and interpretation, (c) periodic reconvening to share findings, (d) critiquing of technical products, (e) continuing subgroup work, and (f) review and synthesis by the group.

Between meetings, preliminary drafts of the evolving group document would be distributed for review to the Technical Group. The facilitators and/or the coordinator would be responsible for reviewing the quality and consistency of the product, conducting minor editing, distributing group products back to the Group and setting agendas and identifying new tasks for the following meeting. Again the Coordinating Group would be a resource for these inter-meeting activities. During the same interval, the Technical Group would have responsibility to share accomplishments with their peers and supervisory personnel in their respective agencies. They would have particularly important responsibilities to inform and prepare their counterparts on the Policy Group.

Policy Group

The Policy Group would also be composed of personnel appointed from the state agencies. They would be persons responsible for writing policy for their individual agencies. They should meet at least twice to relate and translate the findings of the Technical Group into recommendations for practice, policy and program that may be implemented by the individual states or the Regional Office. Each meeting should be 2-3 days, with up to one month intervening, so that materials and any other resources might be prepared and distributed.

The major task of the group would be to identify the necessary and the workable actions which the states might take to correct the problem. The product of their effort would be a document which (a) defines the problem and approach taken to developing solutions, (b) documents the primary issues that need to be addressed, (c) presents a rationale for the issues and the alternatives that might be pursued, as evidenced in the project's research and existing law, policy, and procedures, and (d) presents specific recommendations for practice and policy for the states, region or professional development. One or more members of this group and from among the Coordinating Group would be identified to serve on the Editorial Group.

Prior to the first meeting, the product of the Technical Group would have been distributed to the Policy Group, along with an outline of tasks to be accomplished during the meetings and an agenda for the first meeting. Again, their meetings must be quite structured with clearly established objectives. The same facilitator(s) from the Coordinating Group would work with the group, making necessary assignments to specific subgroups, challenge interpretations and recommendations, and generally monitor and facilitate accomplishment of their report.

A cycle similar to that used with the Technical Group would be followed. An interim report would be the product from each meeting. An underlying goal for the facilitators will be to bring the group to consensus as to the principal issues and recommendations that are to be proposed.

Between meetings, the preliminary report would be reviewed by the facilitators and/or coordinator to determine agenda items for the next session, make individual suggestions and inter-meeting assignments, and distribute the document. The document should be distributed to both the Technical and Policy groups. The two groups would be expected to share their reactions with each other and with directors or supervisors in their own state in an effort to set the stage for adoption of the project recommendations.

Review

Following the last meeting, a thorough review of the document would be conducted by the coordinator and/or facilitators to assure quality, integration and faithful representation of the issues, rationale and recommendations. They would also be responsible for distribution to the several groups responsible for review.

At least four formal reviews would be undertaken. The first, would be a review by the Technical and Policy groups to determine their concurrence with the full document, including the wording of specific issues and recommendations. The second review would be by the state directors. The document in its entirety would be distributed to the state directors for their objections and comment. Members of the Technical and Policy Groups would be notified of this distribution to work with their directors during their review. Following that review, a peer review may be undertaken to solicit reactions to the technical, philosophical, and practical utility of the project results and recommendations. Finally, one additional review of the revised document would be made by state directors and/or the Region V Council of State Administrators of Vocational Rehabilitation. This review would seek document approval, action on the recommendations by the state programs, and approval of a dissemination plan.

Editorial Group

An Editorial Group, selected from the Coordinating, Technical and Policy Groups, would convene prior to the last review by state directors. The necessary secretarial and word processing resources to accomplish any revisions would be arranged by the coordinator. This group would have the responsibility for responding to all critical and substantive responses from the state directors, from the reviews provided by members of the groups and from peer review. The principle task would be to complete the final report. This Group should formulate a dissemination plan based upon the importance of the issue and the quality of the product of the research.

Dissemination

Pending acceptance of the report and decision that the results of the effort require dissemination, primary and secondary sources should be identified through which the document might continue to be available to the state agencies and the professions. If the results are of limited interest, the individual states may prefer to handle primary dissemination. However, if the results are of wider interest, a resource like the Research and

Training Center at the University of Wisconsin-Stout, with printing and a national distribution system, should be contracted with to do such development and implement ongoing dissemination. Either dissemination plan should include provision for archiving the research findings and policy recommendations with the following clearinghouses: National Rehabilitation Information Center, Catholic University, Washington, D.C.; the Oklahoma Clearinghouse, Oklahoma University, Stillwater, Oklahoma; the Materials Development Center, University of Wisconsin-Stout, Menomonie, Wisconsin; the Educational Research Information Center(s), Ohio State University, Columbus, Ohio; the National Technical Information Services, University of Michigan, Ann Arbor, Michigan.

A secondary dissemination effort should include presentations by members of the various groups to their respective state agencies, to the program evaluators, to the staff at the regional or national office of the Rehabilitation Services Administration, and to area or national meetings of the Council of State Administrators of Vocational Rehabilitation. As warranted by the research, the plan should identify and stimulate the preparation of one or more papers for inclusion in professional publications. Finally, the plan should identify how specific issues of consequence will be brought to the attention and actions of practitioners, administrators, consumers, and pre-service and inservice educators.

B. Participating State Directors, Members of the Research Groups, and Peer Reviewers

Participating State Directors

Illinois

Robert Granzier, Director (former), Illinois Department of Rehabilitation Services, Springfield, Illinois.

Susan Suter, Director, Illinois Department of Rehabilitation Services, Springfield, Illinois.

Indiana

Jean Merritt, Commissioner, Indiana Department of Human Services, Indianapolis, Indiana.

Dennis Bega, Director, Division of Rehabilitation Services, Indiana Department of Human Services, Indianapolis, Indiana.

Michigan

Peter P. Griswold, Director, Michigan Rehabilitation Services, Department of Education, Lansing, Michigan.

Phil Peterson, Director, Commission for the Blind, Michigan Department of Labor, Lansing, Michigan.

Minnesota

Ed Opheim, Commissioner (former), Division of Rehabilitation Services, Department of Jobs and Training, St. Paul, Minnesota.

William Niederloh, Commissioner, Division of Rehabilitation Services, Department of Jobs and Training, St. Paul, Minnesota.

Ohio

Robert Rabe, Administrator, Ohio Rehabilitation Services Commission, Columbus, Ohio.

Wisconsin

Patricia G. Kallsen, Administrator (former), Division of Vocational Rehabilitation, Department of Health and Social Services, Madison, Wisconsin.

Judith Norman-Nunnery, Ph.D., Administrator, Division of Vocational Rehabilitation, Department of Health and Social Services, Madison, Wisconsin.

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Technical Group

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C. Region V Closures Before Controlling for Gender [1]
Table of Percentages and Averages (Means)

	PERCENTS OF CLOSURES				ACCEPTANCE		REHABILTATION
TYPE FY GENDER	08	26	28	30	Numbers	Rates	RATE
Total Means (n = 156)							
	1.823	26.835	10.268	4.873	251.862	50.600	32.600
Means by Years (n's per year = 12)							
72	0.708	33.861	6.430	3.847	264.834	53.000	41.100
73	0.833	35.042	7.708	3.819	279.414	56.050	42.200
74	0.680	32.153	8.333	3.944	266.586	53.450	38.850
75	0.764	24.639	8.792	4.472	227.418	45.600	29.900
76	1.417	21.028	12.583	5.569	235.086	46.950	25.500
77	2.250	23.361	11.041	4.292	232.164	46.550	28.200
78	2.042	24.542	10.292	4.805	237.834	47.700	29.600
79	2.153	25.250	10.653	4.819	244.332	49.050	30.750
80	2.236	25.250	9.750	5.083	240.498	48.200	30.600
81	2.486	23.972	10.667	5.111	238.500	48.100	29.250
82	2.611	25.597	12.222	6.125	263.664	53.300	31.400
83	2.653	25.820	13.014	5.792	267.750	54.150	31.500
84	2.861	28.347	12.000	5.667	276.084	55.400	34.300
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)							
Men 1	2.353	31.686	12.763	6.259	304.242	49.400	30.800
Women 2	1.293	21.985	7.773	3.487	199.476	51.800	34.300
Men by Year (n's per Year = 6)							
72	0.944	42.361	9.056	5.472	341.334	52.800	39.400
73	1.083	43.972	9.528	5.167	352.002	55.100	41.300
74	0.944	40.083	10.750	5.222	336.336	53.100	38.000
75	1.111	28.750	11.278	5.667	274.164	44.700	28.100
76	1.722	24.333	16.055	7.278	286.002	47.000	24.000
77	2.833	27.583	13.361	5.361	277.836	45.700	27.200
78	2.555	29.361	12.778	5.833	287.832	46.900	28.800
79	2.833	27.861	12.694	6.305	281.166	47.400	28.200
80	3.000	28.389	12.028	6.361	280.668	47.100	28.600
81	2.972	27.472	13.250	6.500	283.332	46.000	26.700
82	3.167	28.805	14.583	7.889	307.668	50.600	28.400
83	3.722	29.667	16.000	6.833	315.000	51.300	29.000
84	3.694	33.278	14.556	7.472	331.836	54.300	32.700
Women by Year (n's per Year = 6)							
72	0.472	25.361	3.805	2.222	188.334	53.200	42.800
73	0.583	26.111	5.889	2.472	206.832	57.000	43.100
74	0.417	24.222	5.917	2.667	196.836	53.800	39.700
75	0.417	20.528	6.305	3.278	180.666	46.500	31.700
76	1.111	17.722	9.111	3.861	184.164	46.900	27.000
77	1.667	19.139	8.722	3.222	186.498	47.400	29.200
78	1.528	19.722	7.805	3.778	187.830	48.500	30.400
79	1.472	22.639	8.611	3.333	207.498	50.700	33.300
80	1.472	22.111	7.472	3.805	200.334	49.300	32.600
81	2.000	20.472	8.083	3.722	193.668	50.200	31.800
82	2.055	22.389	9.861	4.361	219.666	56.000	34.400
83	1.583	21.972	10.028	4.750	220.500	57.000	34.000
84	2.028	23.417	9.444	3.861	220.332	56.500	35.900

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[1] State-level percentages and rates and numbers occurring in each 500 cases were the units of observation in each analysis. One thousand cases were randomly selected for each of the six state programs in each fiscal year. Gender percentages for each state and year were computed based on natural occurrences of men and women within the random sample. Those percentages, therefore, are not independent. These results are based upon 78,000 cases.

D. Characteristics of Applicants
Analyses of Variance [1]

Descriptions of Variables	MEAN SQUARES			F-RATIOS			P-LEVELS		
	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)
Acceptance Rate	0.016	0.082	0.001	1.32	6.84	0.08	0.253	0.000	1.000
Ref. Source-Indiv and Priv Org	2548.408	8808.779	69.186	4.53	15.65	0.12	0.036	0.000	0.999
Ref. Source-Hosp and Health Org	8.008	932.760	189.879	0.01	1.69	0.34	0.904	0.101	0.958
Ref. Source-Public Organ.	20988.075	8871.712	113.890	14.93	6.31	0.08	0.000	0.000	1.000
Ref. Source-Welfare	2774.408	454.879	62.316	13.84	2.27	0.31	0.000	0.023	0.970
Ref. Source-Education	1562.408	121.223	34.001	4.33	0.34	0.09	0.040	0.961	1.000
Severely Disabled	2774.408	2282.986	270.038	1.04	0.85	0.10	0.311	0.570	1.000
Age Group - 16 to 24	9469.633	1936.607	104.930	32.10	6.56	0.36	0.000	0.000	0.953
Age Group - 25 to 34	4979.408	1350.223	249.482	20.28	5.50	1.02	0.000	0.000	0.432
Age Group - 35 to 44	1421.408	271.205	23.612	13.25	2.53	0.22	0.000	0.012	0.991
Age Group - 45 to 54	1068.033	545.578	33.681	6.10	3.12	0.19	0.015	0.002	0.995
Age Group - 55 to 64	826.875	28.890	25.727	9.63	0.34	0.30	0.003	0.961	0.973
Ethnic - White	8.533	683.300	39.478	0.01	0.43	0.03	0.941	0.913	1.000
Ethnic - Black	66.008	201.112	21.971	0.04	0.12	0.01	0.846	0.999	1.000
Ethnic - Spanish Surname	246.533	12.652	9.700	9.38	0.48	0.37	0.003	0.884	0.947
Other Ethnic Group	4.033	1081.244	30.811	0.00	1.08	0.03	0.950	0.385	1.000
Marital Status - Married	42187.500	686.096	208.352	87.48	1.42	0.43	0.000	0.189	0.915
Marital Status - Widowed	12751.408	53.949	55.112	359.28	1.52	1.55	0.000	0.151	0.140
Marital Status - Divorced	36226.875	493.231	87.949	184.67	2.51	0.45	0.000	0.012	0.905
Marital Status - Separated	5922.075	49.964	53.668	67.69	0.57	0.61	0.000	0.818	0.783
Marital Status - Never Married	34307.008	1700.597	248.101	54.41	2.70	0.39	0.000	0.007	0.936
Marital Status - Unknown	75.208	6060.305	222.356	0.02	1.94	0.07	0.877	0.055	1.000
Head of Household	19891.875	1113.060	102.394	12.36	0.69	0.06	0.001	0.715	1.000
Education Group - 8 Thru 11	7600.208	1787.408	71.764	15.49	3.64	0.15	0.000	0.001	0.998
Education Group - 12	8118.075	1321.916	254.316	6.36	1.04	0.20	0.013	0.417	0.994
Education Group - 13 Thru 15	1.200	200.959	46.589	0.02	3.18	0.74	0.891	0.002	0.674
Education Group - 16 or More	43.200	60.515	17.089	2.12	2.97	0.84	0.148	0.004	0.581
Soc. Security at Referral	154.133	2780.207	71.596	0.24	4.24	0.11	0.629	0.000	0.999
Pub. Assist. at Referral	20150.208	435.971	328.727	16.94	0.37	0.28	0.000	0.948	0.980
Not Accepted For Services	83.333	113.930	17.870	1.02	1.39	0.22	0.315	0.201	0.991
Reason Not Acc.-Cant Locate	2218.800	488.126	43.633	3.37	0.74	0.07	0.069	0.670	1.000
Reason Not Acc.-Too Severe	10.208	73.186	15.542	0.09	0.64	0.14	0.765	0.759	0.999
Reason Not Acc.-Refused	346.800	4374.593	119.041	0.30	3.77	0.10	0.586	0.000	1.000
Reason Not Acc.-Death	0.033	2.874	3.089	0.02	1.39	1.49	0.899	0.202	0.160
Reason Not Acc.-Institutional	156.408	6.560	3.945	19.10	0.80	0.48	0.000	0.616	0.884
Reason Not Acc.-Transferred	1.875	17.168	3.153	0.27	2.46	0.45	0.606	0.014	0.903
Reason Not Acc.-No Disability	529.200	309.293	26.848	12.05	7.04	0.61	0.001	0.000	0.785
Reason Not Acc.-No Potential	1.408	103.816	21.853	0.03	1.99	0.42	0.870	0.048	0.922
Annual Income at Referral	9380.287	393767.934	204653.336	0.03	1.20	0.62	0.866	0.305	0.775
Annual Income/Adjust for Pov	162509.741	141066.978	219748.964	0.36	31.35	0.49	0.549	0.000	0.879
Work at Ref. - Competitive	0.675	444.094	71.434	0.01	3.50	0.56	0.942	0.001	0.824
Work at Ref. - Sheltered	12.033	2.574	2.515	2.10	0.45	0.44	0.150	0.905	0.911
Work at Ref. - Self Emp/BEP	73.633	0.504	2.207	24.52	0.17	0.73	0.000	0.997	0.676
Work at Ref. - Home Worker	24367.500	60.019	28.648	486.80	1.20	0.57	0.000	0.304	0.817
Work at Ref. - Not Working	18525.675	6772.760	365.508	2.99	1.09	0.06	0.087	0.374	1.000
Previously Closed From VR	567.675	163.690	64.712	2.05	0.59	0.23	0.156	0.802	0.989
Ever in Status 06	104.533	287.593	25.589	0.48	1.32	0.12	0.491	0.238	0.999
Months to 08	2.045	20.973	0.310	0.80	8.16	0.12	0.374	0.000	0.999
Months to Acceptance	0.128	18.377	0.722	0.02	2.61	0.10	0.893	0.009	1.000

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[1] Degrees of freedom for each analysis were Gender, 1; Fiscal Year, 9; Gender by Fiscal Year, 9; and Error, 111.

D. Characteristics of Applicants

Table of Percentages and Averages (Means)

Type	FY	Gndr	Rates: Accept	Refer Source: Individ	Refer Source: Hosptl	Refer Source: Pub Org	Refer Source: Welfare	Refer Source: Educatn	Severely Disabled	Disab: Vision	Previous Closure
Total Means (n = 120)											
	0		42.44	36.37	18.14	28.07	7.03	10.30	45.12	3.68	8.24
Means by Year (n's per Year = 12)											
	75		45.17	26.03	15.93	36.77	9.52	11.52	41.77	2.98	7.47
	76		46.77	31.02	17.10	33.08	8.05	10.55	45.63	2.93	8.55
	77		45.57	32.92	17.10	32.13	7.57	10.25	42.32	3.35	8.67
	78		46.57	35.32	16.77	30.10	7.02	10.73	44.65	3.42	8.28
	79		46.28	35.85	17.60	28.38	7.38	10.72	45.35	3.62	8.40
	80		46.98	36.60	17.48	29.15	6.95	9.78	45.70	2.97	8.02
	81		43.87	38.98	17.78	27.33	6.67	9.17	47.00	3.72	8.40
	82		44.93	41.27	20.18	22.23	6.42	9.90	49.37	4.28	9.65
	83		38.22	43.17	21.33	19.95	5.28	10.17	48.38	4.92	8.13
	84		20.03	42.57	20.10	21.52	5.47	10.27	41.08	4.62	6.85
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 60)											
Men		1	41.29	35.45	18.09	30.71	6.07	9.58	44.16	2.81	8.68
Women		2	43.59	37.29	18.19	25.42	7.99	11.03	46.09	4.55	7.81
Means for Men by Year (n's per Year = 6)											
	75		44.50	26.07	14.93	40.20	7.57	11.03	41.10	2.77	8.57
	76		44.73	30.20	16.37	36.17	7.10	9.87	44.13	2.07	8.87
	77		44.30	32.03	17.67	34.70	6.67	8.87	42.30	2.73	8.83
	78		45.20	34.37	17.23	32.90	5.73	9.73	44.80	2.63	8.83
	79		43.83	34.90	17.30	31.33	6.20	10.17	45.50	2.57	8.77
	80		45.13	35.37	16.93	32.17	6.07	9.47	45.10	2.30	8.80
	81		42.97	38.63	17.33	30.17	5.70	8.10	44.70	2.50	9.03
	82		43.60	40.23	19.73	24.67	6.10	9.27	48.07	3.10	9.20
	83		38.23	41.60	21.60	22.03	4.83	9.80	45.90	3.87	8.10
	84		20.37	41.10	21.77	22.77	4.73	9.53	40.03	3.53	38.83
Means for Women by Year (n's per Year = 6)											
	75		45.83	26.00	16.93	33.33	11.47	12.00	42.43	3.20	6.37
	76		48.80	31.83	17.83	30.00	9.00	11.23	47.13	3.80	8.23
	77		46.83	33.80	16.53	29.57	8.47	11.63	42.33	3.97	8.50
	78		47.93	36.27	16.30	27.30	8.30	11.73	44.50	4.20	7.73
	79		48.73	36.80	17.90	25.43	8.57	11.27	45.20	4.67	8.03
	80		48.83	37.83	18.03	26.13	7.83	10.10	46.30	3.63	7.23
	81		44.77	39.33	18.23	24.50	7.63	10.23	49.30	4.93	7.77
	82		46.27	42.30	20.63	19.80	6.73	10.53	50.67	5.47	10.10
	83		38.20	44.73	21.07	17.87	5.73	10.53	50.87	5.97	8.17
	84		19.70	44.03	18.43	20.27	6.20	11.00	42.13	5.70	5.93

D. Characteristics of Applicants
Table of Percentages and Averages (Means) (Continued)

FY	Gndr	Age: 16-24	Age: 25-34	Age: 35-44	Age: 45-54	Age: 55-64	SSDI/ SSI at Refer	Ethnic: White	Ethnic: Black	Ethnic: Other	Spanish Surname	Marital Status: Married	Marital Status: Widowed	Marital Status: Divorce	Marital Status: Separtd	Marital Status: Never	Marital Status: Unknown
Total Means (n = 120)																	
0		32.92	26.71	16.93	13.82	6.52	15.41	74.93	14.35	9.79	1.61	20.76	2.92	12.08	4.54	35.56	23.60
Means for Years (n's per Year = 12)																	
75		37.27	22.23	15.13	16.07	6.40	16.68	75.58	15.77	7.88	1.72	19.52	2.37	9.73	5.02	35.92	25.57
76		35.48	25.35	16.23	15.08	6.07	19.00	75.88	14.50	8.70	1.73	21.05	2.57	11.28	4.75	36.63	23.27
77		34.68	25.90	.67	15.40	6.33	17.45	72.88	14.13	11.92	1.63	21.27	2.63	12.03	4.53	35.68	23.47
78		34.67	25.02	16.92	14.23	6.60	17.90	74.13	15.22	9.68	1.37	22.05	3.42	11.63	4.63	36.68	21.13
79		33.43	26.62	17.07	13.18	6.67	17.12	74.72	13.93	10.35	1.50	21.50	2.65	11.93	4.68	37.12	21.78
80		31.38	28.07	17.62	13.37	6.83	16.15	75.37	13.75	10.08	1.33	22.32	2.93	11.85	4.80	35.88	22.02
81		30.57	28.43	17.67	13.73	6.37	15.28	74.43	14.78	9.98	1.57	21.43	3.22	13.67	4.57	34.77	22.02
82		30.95	29.07	17.35	12.00	6.47	13.70	77.02	14.40	7.57	1.78	20.37	3.75	14.05	4.65	37.38	19.35
83		31.27	28.52	17.67	12.40	6.32	11.43	76.78	14.18	8.12	1.47	21.00	2.88	13.28	4.22	36.38	21.88
84		29.50	27.92	17.97	12.77	7.17	9.38	72.47	12.78	13.65	2.00	17.10	2.83	11.35	3.53	29.13	35.53
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 60)																	
	Men	34.70	28.00	16.24	13.23	6.00	15.64	74.87	14.20	9.76	1.90	24.51	0.86	8.61	3.13	38.94	23.44
	Women	31.14	25.42	17.62	14.42	7.05	15.18	74.98	14.49	9.83	1.32	17.01	4.99	15.56	5.94	32.18	23.76
Means for Men by Year (n's per Year = 6)																	
75		39.37	22.03	14.73	15.17	6.20	17.03	75.97	15.47	7.60	2.03	24.33	0.87	6.00	3.17	38.53	25.60
76		37.43	25.97	15.47	14.27	5.63	19.60	75.47	14.53	8.73	2.20	24.63	1.03	7.63	3.07	39.63	23.43
77		35.27	27.37	15.20	14.83	6.20	17.70	72.57	13.93	12.27	1.77	26.30	0.53	8.63	2.87	37.50	23.83
78		36.73	25.27	16.27	14.13	6.10	18.63	74.67	14.77	9.20	1.93	26.13	1.13	7.63	3.07	39.73	21.77
79		35.97	27.17	16.47	12.13	6.23	17.87	74.23	14.23	10.27	1.87	24.80	0.90	8.13	3.40	40.17	22.23
80		32.63	29.77	16.67	13.33	5.90	16.93	75.37	13.47	10.23	1.47	25.77	1.03	8.60	3.33	38.90	22.13
81		31.70	30.80	17.23	13.17	5.40	15.00	74.57	14.43	9.90	1.87	26.00	0.60	10.20	2.70	38.57	21.73
82		32.90	30.83	16.77	11.27	6.20	13.43	76.57	13.97	8.13	2.23	23.23	0.93	10.57	3.60	41.77	19.40
83		33.33	30.70	16.33	12.00	5.70	10.97	76.67	14.43	7.83	1.57	23.63	0.77	9.40	3.70	41.07	21.10
84		31.63	30.10	17.27	11.97	6.40	9.20	72.67	12.73	9.53	4.73	20.27	0.83	9.27	2.49	33.53	33.19
Means for Women by Year (n's per Year = 6)																	
75		35.17	22.43	15.53	16.97	6.60	16.33	75.20	16.07	8.17	1.40	14.70	3.87	13.47	6.87	33.30	25.53
76		33.53	24.73	17.00	15.90	6.50	18.40	76.30	14.47	8.67	1.27	17.47	4.10	14.93	6.43	33.63	23.10
77		34.10	24.43	16.13	15.97	6.47	17.20	73.20	14.33	11.57	1.50	16.23	4.73	15.43	6.20	33.87	23.10
78		32.60	24.77	17.57	14.33	7.10	17.17	73.60	15.67	10.17	0.80	17.97	5.70	15.63	6.20	33.63	20.50
79		30.90	26.07	17.67	14.23	7.10	16.37	75.20	13.63	10.43	1.13	18.20	4.40	15.73	5.97	34.07	21.33
80		30.13	26.37	18.57	13.40	7.77	15.37	75.37	14.03	9.93	1.20	18.87	4.83	15.10	6.27	32.87	21.90
81		29.43	26.07	18.10	14.30	7.33	15.57	74.30	15.13	10.07	1.27	16.87	5.83	17.13	6.43	30.97	22.30
82		29.00	27.30	17.93	12.73	6.73	13.97	77.47	14.83	7.00	1.33	17.50	6.57	17.53	5.70	33.00	19.30
83		29.20	26.33	19.00	12.80	6.93	11.90	76.90	13.93	8.40	1.37	18.37	5.00	17.17	4.73	31.70	22.67
84		27.37	25.73	18.67	13.57	7.93	9.57	72.27	12.83	13.90	1.97	13.93	4.83	13.43	4.63	24.73	37.87

D. Characteristics of Applicants
Table of Percentages and Averages (Means) (Continued)

Type	FY	Gndr	Head House-hold	Educ: Grades 8-11	Educ: High School	Educ: Grades 13-15	Educ: Grades 16+	Work at Refer: Competitive	Work at Refer: Sheltered	Work at Refer: Self/BEP	Work at Refer: Homemaker	Work at Refer: Not Working	Months: Statuses 02-08	Months: Statuses 02-10	Public Assist at Ref
Total Means (n = 120)															
	0		30.26	21.58	29.68	7.65	2.66	8.16	0.68	0.36	3.48	56.51	7.07	5.01	17.54
Means for Years (n's per Year = 12)															
	75		28.90	23.65	25.10	6.95	1.83	8.13	0.63	0.40	3.27	54.12	7.96	5.66	17.27
	76		30.65	24.12	28.62	6.70	2.27	7.40	0.83	0.32	3.23	57.92	9.02	6.12	18.58
	77		30.80	23.05	29.03	6.95	2.35	8.18	0.60	0.42	3.25	57.53	8.37	6.50	17.23
	78		31.05	23.60	30.52	7.25	2.48	9.78	0.57	0.32	3.33	58.28	7.68	5.38	16.83
	79		31.47	21.75	30.02	8.05	2.60	9.78	0.82	0.33	3.32	57.48	7.13	5.57	17.90
	80		30.97	21.15	30.78	7.87	2.87	9.65	0.68	0.35	3.65	57.82	6.67	5.28	17.52
	81		32.32	20.65	31.32	8.07	3.15	7.92	0.62	0.42	4.02	58.00	6.88	5.13	18.32
	82		31.38	22.22	31.12	8.78	3.35	6.55	0.68	0.32	4.20	61.72	6.59	4.45	19.08
	83		29.53	19.62	32.38	8.97	2.83	7.55	0.77	0.37	3.87	58.18	6.16	3.76	17.92
	84		25.52	15.98	27.93	6.88	2.90	6.67	0.63	0.33	2.70	44.00	4.28	2.27	14.70
Means for Gender (1 = Men, 2 = Women) (n's per Gender = 60)															
Men		1	32.83	23.17	28.04	7.67	2.54	8.15	0.62	0.51	0.63	58.99	7.21	4.98	14.94
Women		2	27.68	19.99	31.33	7.63	2.78	8.18	0.75	0.20	6.33	54.02	6.94	5.05	20.13
Means for Men by Year (n's per Year = 6)															
	75		31.90	24.77	23.73	6.83	2.13	8.40	0.67	0.63	0.77	56.00	8.39	5.20	13.13
	76		33.30	25.77	26.27	6.23	2.23	7.17	0.80	0.43	0.50	60.13	9.37	5.73	14.57
	77		34.10	24.40	27.10	7.30	2.27	8.77	0.57	0.67	0.47	58.87	8.39	6.82	14.20
	78		34.03	25.33	28.30	7.77	1.97	10.47	0.47	0.50	0.63	59.93	7.69	5.37	13.43
	79		33.20	23.77	27.27	8.13	2.63	10.20	0.70	0.30	0.60	58.30	7.18	5.68	15.20
	80		33.87	21.90	29.50	7.83	2.57	8.87	0.80	0.53	0.47	60.67	6.80	5.33	16.00
	81		35.00	22.87	28.90	8.70	3.13	7.43	0.40	0.67	0.97	60.70	7.14	5.28	16.03
	82		32.80	23.70	29.83	8.40	3.37	6.57	0.57	0.47	0.97	65.03	6.65	4.29	17.03
	83		31.97	21.90	31.07	8.50	2.43	7.27	0.67	0.50	0.63	62.17	6.17	3.71	16.23
	84		30.10	17.27	28.39	6.96	2.70	6.33	0.57	0.43	0.33	48.10	4.26	2.42	13.60
Means for Women by Year (n's per Year = 6)															
	75		25.90	22.53	26.47	7.07	1.53	7.87	0.60	0.17	5.77	52.23	7.52	6.12	21.40
	76		28.00	22.47	30.97	7.17	2.30	7.63	0.87	0.20	5.97	55.70	8.67	6.52	22.60
	77		27.50	21.70	30.97	6.60	2.43	7.60	0.63	0.17	6.03	56.20	8.35	6.19	20.27
	78		28.07	21.87	32.73	6.73	3.00	9.10	0.67	0.13	6.03	56.63	7.68	5.39	20.23
	79		29.73	19.73	32.77	7.97	2.57	9.37	0.93	0.37	6.03	56.67	7.08	5.47	20.60
	80		28.07	20.40	32.07	7.90	3.17	10.43	0.57	0.17	6.83	54.97	6.54	5.22	19.03
	81		29.63	18.43	33.73	7.43	3.17	8.40	0.83	0.17	7.07	55.30	6.62	4.99	20.60
	82		29.97	20.73	32.40	9.17	3.33	6.53	0.80	0.17	7.43	58.40	6.53	4.62	21.13
	83		27.10	17.33	33.70	9.43	3.23	7.83	0.87	0.23	7.10	54.20	6.15	3.81	19.60
	84		22.87	14.67	27.47	6.80	3.10	7.00	0.70	0.23	5.07	39.90	4.29	2.13	15.80

D. Characteristics of Applicants

Table of Percentages and Averages (Means) (Continued)

Type	FY	Gdr	Closure Status: 08	Not Acc: Unable Locate	Not Acc: Hard to Serve	Not Acc: Refused Service	Not Acc: Death	Not Acc: Institu-tionalzd	Not Acc: Transfrd Another	Not Acc: No Disab Conditn	Not Acc: No Voctn Potentl	Not Acc: Other	Earnings at Entry: Unadjusted	Earnings at Entry: Adjusted
Total Means (n = 120)														
	0		2.66	8.86	4.71	22.05	0.38	0.71	0.58	2.89	3.06	0.00	1508.99	-4553.24
Means for Years (n's per Year = 12)														
	75		1.83	8.73	5.27	21.68	0.53	1.02	0.37	2.97	2.73	0.00	1400.75	-2971.09
	76		2.27	8.67	4.98	20.28	0.37	0.58	0.28	2.38	2.78	0.00	1314.54	-3426.48
	77		2.62	11.70	4.15	18.88	0.20	0.80	0.38	2.52	2.85	0.00	1315.11	-3664.53
	78		2.83	8.92	4.47	20.10	0.33	0.60	0.52	2.15	2.60	0.00	1300.67	-3994.53
	79		2.57	8.37	4.88	20.53	0.35	0.55	0.65	2.12	2.98	0.00	1599.83	-3960.84
	80		2.72	7.87	4.65	20.18	0.43	0.65	0.58	2.32	2.63	0.00	1708.19	-4822.47
	81		3.73	8.68	5.03	20.42	0.42	0.58	0.35	2.53	2.95	0.00	1633.51	-5243.29
	82		3.30	7.40	4.15	22.10	0.33	0.75	0.83	2.82	2.95	0.00	1407.41	-5784.37
	83		3.00	7.93	4.07	24.22	0.50	0.70	0.88	3.57	3.50	0.00	1620.50	-5925.67
	84		1.73	10.37	5.47	32.10	0.30	0.85	0.93	5.50	4.57	0.00	1789.38	-5739.16
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 60)														
		Men	2.83	9.72	4.65	22.39	0.38	0.94	0.60	2.47	3.03	0.00	1517.83	-4590.04
		Women	2.49	8.00	4.77	21.71	0.37	0.48	0.55	3.31	3.08	0.00	1500.15	-4516.44
Means for Men by Year (n's per Year = 6)														
	75		2.27	8.97	5.10	21.40	0.50	1.47	0.37	2.77	2.67	0.00	1429.46	-3079.93
	76		2.20	9.67	4.63	20.87	0.47	0.73	0.30	2.07	3.17	0.00	1318.80	-3408.85
	77		2.53	12.37	3.73	20.50	0.30	0.93	0.50	2.13	2.83	0.00	1495.98	-3564.83
	78		3.07	9.83	4.50	20.23	0.40	0.87	0.47	1.87	2.40	0.00	1356.80	-3987.46
	79		2.37	9.63	4.67	21.17	0.33	0.70	0.73	1.77	3.43	0.00	1768.77	-3841.65
	80		2.80	8.77	4.70	20.90	0.43	0.93	0.77	2.07	2.23	0.00	1829.16	-4854.13
	81		4.20	9.63	4.97	20.53	0.37	0.90	0.37	2.00	2.63	0.00	1576.85	-5449.30
	82		3.80	7.80	4.40	22.60	0.43	0.80	0.63	2.50	2.93	0.00	1341.58	-5916.31
	83		3.17	8.67	4.30	24.30	0.27	0.90	0.93	3.23	3.43	0.00	1391.46	-6182.36
Means for Women by Year (n's per Year = 6)														
	84		9.33	11.90	5.33	31.40	0.30	1.13	0.97	4.27	4.60	0.00	1669.44	-5615.62
	75		1.40	8.50	5.43	21.97	0.57	0.57	0.37	3.17	2.80	0.00	1372.04	-2862.25
	76		2.33	7.67	5.33	19.70	0.27	0.43	0.27	2.70	2.40	0.00	1310.28	-3444.11
	77		2.70	11.03	4.57	17.27	0.10	0.67	0.27	2.90	2.87	0.00	1134.24	-3764.22
	78		2.60	8.00	4.43	19.97	0.27	0.33	0.57	2.43	2.80	0.00	1244.54	-4001.61
	79		2.77	7.10	5.10	19.90	0.37	0.40	0.57	2.47	2.53	0.00	1430.88	-4080.03
	80		2.63	6.97	4.60	19.47	0.43	0.37	0.40	2.57	3.03	0.00	1587.22	-4790.82
	81		3.27	7.73	5.10	20.30	0.47	0.27	0.33	3.07	3.27	0.00	1690.18	-5037.29
	82		2.80	7.00	3.90	21.60	0.23	0.70	1.03	3.13	2.97	0.00	1473.23	-5652.43
	83		2.83	7.20	3.83	24.13	0.73	0.50	0.83	3.90	3.57	0.00	1849.54	-5668.98
	84		1.60	8.83	5.40	32.80	0.30	0.57	0.90	6.73	4.53	0.00	1909.33	-5862.70

E. Characteristics of Accepted Individuals
Analyses of Variance [1]

Descriptions of Variables	MEAN SQUARES Gender (A)	MEAN SQUARES Fiscal Year (B)	MEAN SQUARES (A x B)	F-RATIOS Gender (A)	F-RATIOS Fiscal Year (B)	F-RATIOS (A x B)	P-LEVELS Gender (A)	P-LEVELS Fiscal Year (B)	P-LEVELS (A x B)
Age Group - 16 to 24	12331.853	7332.536	222.936	16.53	9.83	0.30	0.000	0.000	0.989
Age Group - 25 to 34	1114.673	3935.053	83.784	2.82	9.95	0.21	0.096	0.000	0.998
Age Group - 35 to 44	266.769	670.639	45.630	1.82	4.56	0.31	0.180	0.000	0.987
Age Group - 45 to 54	2292.333	81.859	50.444	22.47	0.80	0.49	0.000	0.647	0.915
Age Group - 55 to 64	844.673	64.491	21.562	13.13	1.00	0.34	0.000	0.450	0.981
Ethnic - White	47.410	746.717	164.952	0.02	0.39	0.09	0.875	0.965	1.000
Ethnic - Black	506.160	725.425	144.244	0.24	0.35	0.07	0.622	0.978	1.000
Ethnic - Spanish Surname	154.006	4.119	8.909	9.25	0.25	0.54	0.003	0.995	0.888
Other Ethnic Group	23.853	8.619	7.783	0.77	0.28	0.25	0.382	0.992	0.995
Marital Status - Married	126939.103	379.647	166.353	332.49	0.99	0.44	0.000	0.458	0.946
Marital Status - Widowed	24125.641	29.561	30.599	480.62	0.59	0.61	0.000	0.848	0.831
Marital Status - Divorced	79741.853	1278.382	172.325	434.84	6.97	0.94	0.000	0.000	0.510
Marital Status - Separated	15460.314	85.311	44.578	165.39	0.91	0.48	0.000	0.536	0.925
Marital Status - Never Married	42207.410	1975.748	533.049	43.60	2.04	0.55	0.000	0.025	0.877
Marital Status - Unknown	0.641	1.040	0.238	2.94	4.77	1.09	0.089	0.000	0.371
Head of Household	81698.077	648.137	648.605	46.52	0.37	0.37	0.000	0.972	0.972
Education Group - 8 Thru 11	8141.853	7526.994	103.686	30.07	27.80	0.38	0.000	0.000	0.968
Education Group - 12	11510.256	3604.683	51.604	15.16	4.75	0.07	0.000	0.000	1.000
Education Group - 13 Thru 15	46.314	874.238	69.411	0.44	8.24	0.65	0.510	0.000	0.792
Education Group - 16 or More	72.026	201.259	27.359	3.46	9.67	1.31	0.065	0.000	0.218
Severely Disabled	5066.160	183966.794	277.341	3.50	127.02	0.19	0.064	0.000	0.999
Pub. Assist. at Referral	56620.410	1997.710	505.035	62.30	2.20	0.56	0.000	0.015	0.874
Soc. Security at Referral	410.314	6171.701	117.481	0.23	18.49	0.35	0.270	0.000	0.977
Ref. Source-Indiv/Priv Org	3510.256	12321.097	183.743	4.12	14.45	0.22	0.044	0.000	0.998
Ref. Source-Hospitals/Health	1141.564	162.016	70.522	1.56	0.22	0.10	0.214	0.997	1.000
Ref. Source-Public Org	39330.314	442.113	389.147	68.48	0.77	0.68	0.000	0.680	0.770
Ref. Source-Welfare	6893.391	2285.447	222.891	37.32	12.37	1.21	0.000	0.000	0.285
Ref. Source-Education	506.160	3150.276	224.855	0.32	1.98	0.14	0.573	0.031	1.000
Work at Ref. - Competitive	816.981	439.634	131.828	2.23	1.20	0.36	0.138	0.291	0.975
Work at Ref. - Sheltered	105.026	8.877	4.734	9.49	0.80	0.43	0.003	0.648	0.950
Work at Ref. - Self Emp/BEP	248.776	5.665	2.387	50.52	1.15	0.48	0.000	0.326	0.921
Work at Ref. - Home Worker	62640.231	84.210	31.911	606.95	0.82	0.31	0.000	0.634	0.987
Work at Ref. - Not Working	44339.103	689.891	297.936	61.73	0.96	0.41	0.000	0.490	0.956
Referral Income - Unadjusted	709835.796	395997.455	40260.528	3.92	2.19	0.22	0.050	0.016	0.997
Referral Income - Adj/Poverty	323891.581	152651.536	67578.778	1.46	69.00	0.31	0.229	0.000	0.972
Previously Closed From VR	221.769	391.317	56.200	0.76	1.34	0.19	0.386	0.205	0.999

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[1] Degrees of freedom for each analysis were Gender, 1; Fiscal Year, 12; Gender by Fiscal Year, 12; and Error, 131.

E. Characteristics of Applicants
Table of Percentages and Averages (Means)

Type	FY	Gndr	Refer Source: Individ	Refer Source: Hosptl	Refer Source: Pub Org	Refer Source: Welfare	Refer Source: Educatn	Severely Disabled	Public Assistance: Referral
Total Means (n = 156)									
	0		35.47	19.72	17.60	8.20	18.88	42.40	21.29
Means for Years (n's per Year = 12)									
	72		27.90	20.70	18.62	8.63	23.97	0.00	14.13
	73		27.52	19.25	19.08	11.20	22.88	0.00	18.13
	74		26.85	18.52	17.80	13.08	23.52	0.00	23.40
	75		28.47	19.50	18.23	11.87	21.75	42.68	21.82
	76		31.23	19.18	18.98	10.40	19.95	48.50	23.33
	77		34.35	19.33	17.88	9.03	19.25	52.32	23.82
	78		36.83	18.87	18.03	8.12	18.02	52.55	22.07
	79		38.22	20.97	17.23	6.68	16.73	54.95	22.15
	80		39.93	19.72	16.90	6.32	17.12	57.22	21.45
	81		41.22	19.77	18.22	5.83	14.87	59.02	20.75
	82		41.38	20.63	16.93	5.43	15.55	61.72	21.52
	83		42.97	19.72	16.07	5.28	15.88	60.37	22.57
	84		44.20	20.22	14.77	4.77	15.97	61.83	21.60
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)									
		Men	34.52	19.18	20.77	6.87	18.52	41.26	17.48
		Women	36.41	20.26	14.42	9.53	19.24	43.54	25.10
Men by Year (n's per Year = 6)									
	72		27.63	19.60	22.57	7.63	22.37	0.00	12.63
	73		27.37	18.80	2.20	8.97	20.60	0.00	15.00
	74		26.60	17.67	22.17	10.57	22.77	0.00	18.13
	75		28.27	18.60	22.53	9.30	21.07	40.37	17.10
	76		30.00	19.07	22.97	8.37	19.37	47.20	17.90
	77		34.43	18.00	21.20	6.97	19.17	50.53	19.33
	78		36.63	17.93	20.07	7.10	18.10	50.93	17.67
	79		36.57	20.37	20.10	5.47	17.37	55.00	17.73
	80		38.07	19.43	19.90	5.53	17.07	56.77	17.20
	81		39.83	19.97	19.50	5.20	15.43	56.30	17.17
	82		39.40	20.10	20.00	4.97	15.47	60.50	17.87
	83		41.30	20.00	17.90	5.43	15.33	58.80	21.47
	84		42.63	19.80	16.93	3.87	16.67	59.93	18.00
Women by Year (n's per Year = 6)									
	72		28.17	21.80	14.67	9.63	25.57	0.00	15.63
	73		27.67	19.70	13.97	13.43	25.17	0.00	21.27
	74		27.10	19.37	13.43	15.60	24.27	0.00	28.67
	75		28.67	20.40	13.93	14.43	22.43	45.00	26.53
	76		32.47	19.30	15.00	12.43	20.53	49.80	28.77
	77		34.27	20.67	14.57	11.10	19.33	54.10	28.30
	78		37.03	19.80	16.00	9.13	17.93	54.17	26.47
	79		39.87	21.57	14.37	7.90	16.10	54.90	26.57
	80		41.80	20.00	13.90	7.10	17.17	57.67	25.70
	81		42.60	19.57	16.93	6.47	14.30	61.73	24.33
	82		43.37	21.17	13.87	5.90	15.63	62.93	25.17
	83		44.63	19.43	14.23	5.13	16.43	61.93	23.67
	84		45.77	20.63	12.60	5.67	15.27	63.73	25.20

E. Characteristics of Applicants
Table of Percentages and Averages (Means) (Continued)

FY Gndr	Age: 16-24	Age: 25-34	Age: 35-44	Age: 45-54	Age: 55-64	SSDI/ SSI at Refer	Ethnic: White	Ethnic: Black	Ethnic: Other	Spanish Surname	Marital Status: Married	Marital Status: Widowed	Marital Status: Divorce	Marital Status: Separtd	Marital Status: Never	Marital Status: Unknown
Total Means (n = 156)																
0	42.11	23.71	14.60	10.70	5.18	13.30	83.43	14.61	1.24	1.47	26.94	3.46	12.97	5.32	51.14	0.03
Means by Year (n's per Year = 12)																
72	48.07	17.70	13.00	11.07	6.12	6.20	83.12	15.15	1.18	1.33	27.80	3.57	9.17	4.88	54.37	0.13
73	49.05	18.92	12.63	10.05	5.32	5.82	81.27	16.75	1.38	1.38	25.85	3.05	9.90	5.88	55.12	0.12
74	49.43	18.57	12.90	10.03	4.98	5.77	81.08	16.83	1.43	1.43	25.15	3.13	10.75	5.75	54.98	0.15
75	45.53	20.97	13.33	11.20	5.05	12.78	81.60	16.37	1.32	1.57	25.72	3.05	12.12	5.92	52.87	0.00
76	44.02	23.10	13.47	10.58	5.38	15.62	82.28	15.67	1.53	1.35	26.72	3.58	12.05	5.75	51.65	0.00
77	43.97	24.07	13.77	10.13	4.27	16.17	83.65	14.70	1.03	1.53	26.25	3.12	13.18	5.60	51.73	0.00
78	42.45	23.88	14.35	10.87	4.77	16.27	82.92	15.22	1.12	1.62	27.17	3.73	13.08	5.28	50.65	0.00
79	39.65	26.23	15.20	10.97	4.75	16.62	83.23	14.50	1.23	1.63	26.45	3.13	14.65	5.95	49.70	0.00
80	38.48	25.40	15.82	11.67	5.17	17.87	84.75	13.20	0.98	1.60	28.10	3.62	13.80	4.72	49.70	0.00
81	36.48	26.93	16.38	10.90	5.65	17.13	85.07	12.93	1.32	1.35	29.22	3.80	14.18	5.33	47.42	0.00
82	37.12	26.75	16.33	11.02	5.43	16.82	85.07	13.02	1.07	1.55	28.03	3.60	15.32	4.65	48.28	0.00
83	36.92	27.65	16.30	9.98	5.45	13.90	84.60	13.37	1.38	1.32	26.82	3.88	15.12	5.05	48.92	0.00
84	36.25	28.12	16.32	10.67	4.98	11.97	85.90	12.22	1.13	1.48	26.97	3.73	15.33	4.42	49.38	0.00
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)																
Men	43.89	24.25	14.34	9.94	4.71	13.63	83.54	14.25	1.32	1.67	32.65	0.97	8.45	3.33	54.43	0.04
Women	40.33	23.18	14.86	11.47	5.64	12.98	83.31	14.97	1.16	1.27	21.24	5.95	17.50	7.31	47.85	0.02
Men by Year (n's per Year = 6)																
72	47.87	18.07	13.20	10.80	6.10	7.33	83.13	14.77	1.37	1.67	34.23	1.03	5.90	3.40	55.10	0.20
73	49.90	19.90	12.77	9.63	4.57	6.50	81.73	16.40	1.23	1.53	32.17	0.77	7.10	3.70	56.10	0.13
74	50.70	18.50	12.87	9.60	4.23	6.37	82.57	15.47	1.30	1.27	32.17	0.97	6.33	3.40	56.83	0.23
75	47.03	21.23	13.17	10.27	4.60	12.33	82.50	15.03	1.67	1.73	31.57	1.07	7.50	3.43	56.13	0.00
76	45.97	23.00	13.37	9.90	4.60	15.50	81.33	16.03	1.87	1.60	31.43	1.53	7.30	3.87	55.70	0.00
77	45.77	24.47	12.80	9.07	4.23	16.60	82.97	15.37	0.93	1.67	32.33	0.80	8.27	3.13	55.43	0.00
78	45.40	23.70	13.77	9.73	4.33	16.27	82.93	14.70	1.30	2.10	32.97	1.17	7.83	3.47	54.43	0.00
79	42.30	26.37	14.27	10.60	4.03	18.00	84.37	13.17	1.27	1.87	31.90	0.73	9.23	3.57	54.40	0.00
80	40.03	26.37	15.63	10.67	4.70	18.87	84.73	12.80	1.07	2.00	33.13	1.00	9.73	3.17	52.90	0.00
81	39.13	27.47	16.13	9.43	5.43	17.23	85.13	12.50	1.37	1.70	34.80	0.83	9.63	3.37	51.30	0.00
82	38.90	27.90	16.10	10.70	4.90	16.83	84.70	13.00	1.23	1.70	33.27	0.77	10.70	3.20	51.93	0.00
83	38.60	28.93	16.53	9.43	4.80	14.10	83.77	14.07	1.37	1.33	33.10	1.17	10.03	2.80	52.67	0.00
84	38.93	29.33	15.80	9.33	4.73	11.20	86.10	11.93	1.17	1.57	31.33	0.83	10.30	2.80	54.60	0.00
Women by Year (n's per Year = 6)																
72	48.27	17.33	12.80	11.33	6.13	5.07	83.10	15.53	1.00	1.00	21.37	6.10	12.43	6.37	53.63	0.07
73	48.20	17.93	12.50	10.47	6.07	5.13	80.80	17.10	1.53	1.23	19.53	5.33	12.70	8.07	54.13	0.10
74	48.17	18.63	12.93	10.47	5.73	5.17	79.60	18.20	1.57	1.60	18.13	5.30	15.17	8.10	53.13	0.07
75	44.03	20.70	13.50	12.13	5.50	13.23	80.70	17.70	0.97	1.40	19.87	5.03	16.73	8.40	49.60	0.00
76	42.07	23.20	13.57	11.27	6.17	15.73	83.23	15.30	1.20	1.10	22.00	5.63	16.80	7.63	47.60	0.00
77	42.17	23.67	14.73	11.20	4.30	15.73	84.33	14.03	1.13	1.40	20.17	5.43	18.10	8.07	48.03	0.00
78	39.50	24.07	14.93	12.00	5.20	16.27	82.90	15.73	0.93	1.13	21.37	6.30	18.33	7.10	46.87	0.00
79	37.00	26.10	16.13	11.33	5.47	15.23	82.10	15.83	1.20	1.40	21.00	5.53	20.07	8.33	45.00	0.00
80	36.93	24.43	16.00	12.67	5.63	16.87	84.77	13.60	0.90	1.20	23.07	6.23	17.87	6.27	46.50	0.00
81	33.83	26.40	16.63	12.37	5.87	17.03	85.00	13.37	1.27	1.00	23.63	6.77	18.73	7.30	43.53	0.00
82	35.33	25.60	16.57	11.33	5.97	16.80	85.43	13.03	0.90	1.40	22.80	6.43	19.93	6.10	44.63	0.00
83	35.23	26.37	16.07	10.53	6.10	13.70	85.43	12.67	1.40	1.30	20.53	6.60	20.20	7.30	45.17	0.00
84	33.57	26.90	16.83	12.00	5.23	12.73	85.70	12.50	1.10	1.40	22.60	6.63	20.37	6.03	44.17	0.00

E. Characteristics of Applicants
Table of Percentages and Averages (Means) (Continued)

Type FY Gndr	Head Household	Educ: Grades 8-11	Educ: High School	Educ: Grades 13-15	Educ: Grades 16+	Work at Refer: Competitive	Work at Refer: Sheltered	Work at Refer: Self/BEP	Work at Refer: Homemaker	Work at Refer: Not Working	Previous Closure	Income a/Refer: Unadjstd	Income at Entry: Adjusted
Total Means (n = 156)													
0	37.34	29.74	35.68	9.90	3.03	12.64	1.08	0.62	4.78	78.95	10.66	1326.08	-4049.29
Means by Year (n's per Year = 12)													
72	34.45	36.90	31.23	7.67	1.92	13.82	0.93	0.93	4.72	76.70	8.08	1021.30	0.00
73	35.27	37.40	31.95	7.23	1.70	13.65	0.90	0.53	4.47	76.78	8.93	1108.98	0.00
74	36.52	35.78	31.23	7.67	2.15	11.75	0.95	0.50	4.17	80.13	9.68	1122.90	0.00
75	36.28	33.97	31.85	8.45	2.57	13.33	0.87	0.53	3.78	79.22	11.50	1261.31	-2637.58
76	36.28	30.93	33.58	9.72	2.47	12.63	1.35	0.73	4.43	78.93	10.83	1226.75	-2985.88
77	37.35	29.87	35.40	10.42	2.73	11.92	1.22	0.73	4.77	79.83	11.87	1366.85	-3159.38
78	38.28	29.68	36.33	9.55	3.35	12.25	1.33	0.60	4.87	79.68	10.82	1307.35	-3413.42
79	39.08	28.12	37.12	10.30	3.28	12.60	0.97	0.50	5.05	79.05	11.03	1348.45	-3663.76
80	38.62	26.02	37.00	11.85	3.42	14.80	1.18	0.53	4.55	77.55	10.43	1576.71	-3800.47
81	39.12	26.87	37.20	10.48	3.78	13.58	1.27	0.77	5.82	77.00	11.25	1584.32	-4320.11
82	38.32	24.07	39.72	12.10	3.97	12.13	1.12	0.45	4.92	79.88	11.82	1409.59	-5007.31
83	38.08	24.10	40.32	11.53	3.95	11.85	1.00	0.63	5.23	79.82	11.65	1574.32	-5502.05
84	37.72	22.92	40.90	11.78	4.05	10.03	0.95	0.60	5.37	81.72	10.73	1330.24	-6002.90
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)													
Men	41.91	31.18	33.96	9.79	2.89	13.10	0.92	0.87	0.77	82.32	10.90	1393.54	-4101.24
Women	32.76	28.30	37.40	10.01	3.16	12.19	1.24	0.37	8.79	75.57	10.43	1258.63	-3997.33
Men by Year (n's per Year = 6)													
72	42.57	38.43	29.43	7.17	1.80	14.87	0.83	1.33	0.63	79.13	7.60	1170.61	0.00
73	41.90	40.10	30.57	7.23	1.77	14.57	0.57	0.70	0.47	79.77	9.33	1194.60	0.00
74	41.03	36.70	29.63	7.83	2.00	12.67	0.80	0.87	0.63	82.30	10.47	1171.33	0.00
75	40.00	35.87	29.73	9.00	2.47	14.73	0.70	0.77	0.33	81.07	11.73	1312.55	-2632.01
76	40.93	32.13	32.57	9.13	1.90	12.47	1.07	1.07	0.43	82.87	12.00	1249.70	-3070.92
77	42.13	31.40	33.83	10.73	2.47	13.00	1.03	1.00	0.87	82.40	11.93	1461.58	-3190.00
78	41.73	31.23	34.13	9.77	3.03	12.83	1.37	0.87	0.67	82.93	10.80	1371.26	-3390.11
79	41.63	28.70	34.47	10.90	3.00	12.70	0.90	0.60	0.83	82.87	11.63	1359.35	-3725.24
80	43.50	27.37	35.30	11.87	3.70	15.70	1.07	0.83	0.73	80.60	10.27	1701.95	-3734.52
81	44.13	28.53	35.70	10.20	3.97	13.80	1.30	0.90	1.10	81.47	11.33	1628.80	-4444.18
82	42.30	24.67	37.93	11.53	4.13	12.33	0.90	0.67	1.10	83.47	11.93	1388.29	-5082.53
83	42.17	25.27	38.90	11.17	3.20	11.33	0.80	0.93	1.00	84.43	12.03	1754.77	-5545.39
84	40.83	25.00	39.30	10.80	4.13	9.30	0.57	0.80	1.23	86.83	10.67	1351.22	-6197.52
Women by Year (n's per Year = 6)													
72	26.33	35.37	33.03	8.17	2.03	12.77	1.03	0.53	8.80	74.27	8.57	871.99	0.00
73	28.63	34.70	33.33	7.23	1.63	12.73	1.23	0.37	8.47	73.80	8.53	1023.37	0.00
74	32.00	34.87	32.83	7.50	2.30	10.83	1.10	0.13	7.70	77.97	8.90	1074.47	0.00
75	32.57	32.07	33.97	7.90	2.67	11.93	1.03	0.30	7.23	77.37	11.27	1210.08	-2643.15
76	31.63	29.73	34.60	10.30	3.03	12.80	1.63	0.40	8.43	75.00	9.67	1203.79	-2900.85
77	32.57	28.33	36.97	10.10	3.00	10.83	1.40	0.47	8.67	77.27	11.80	1272.12	-3128.75
78	34.83	28.13	38.53	9.33	3.67	11.67	1.30	0.33	9.07	76.43	10.83	1243.45	-3436.74
79	36.53	27.53	39.77	9.70	3.57	12.50	1.03	0.40	9.27	75.23	10.43	1337.56	-3602.27
80	33.73	24.67	38.70	11.83	3.13	13.90	1.30	0.23	8.37	74.50	10.60	1636.65	-3708.15
81	34.10	25.20	38.70	10.77	3.60	13.37	1.23	0.63	10.53	72.53	11.17	1539.83	-4196.05
82	34.33	23.47	41.50	12.67	3.80	11.93	1.33	0.23	8.73	76.30	11.70	1430.88	-4932.10
83	34.00	22.93	41.73	11.90	4.70	12.37	1.20	0.33	9.47	75.20	11.27	1393.88	-5458.72
84	34.60	20.83	42.50	12.77	3.97	10.77	1.33	0.40	9.50	76.60	10.80	1309.27	-5808.29

F. Service Provision
Analyses of Variance [1]

Descriptions of Variables	MEAN SQUARES			F-RATIOS			P-LEVELS		
	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)
Service - Diagnostic	150.026	8489.672	48.976	0.03	1.89	0.01	0.855	0.042	1.000
Service - Restoration	8170.776	415.762	177.040	2.82	0.14	0.61	0.096	0.999	0.834
Service - College Training	2068.103	387.534	106.769	11.74	2.20	0.61	0.001	0.015	0.834
Service - Other Acad. Training	0.641	195.216	18.113	0.00	1.06	0.10	0.953	0.400	1.000
Service - Business School	5858.564	135.132	37.814	102.78	2.37	0.66	0.000	0.009	0.784
Service - Vocational School	2775.410	544.231	69.327	5.98	1.17	0.15	0.016	0.309	1.000
Service - On Job Training	136.641	184.016	20.433	0.94	1.27	0.14	0.334	0.246	1.000
Service - Adjustment	3529.256	571.202	168.409	5.24	0.85	0.25	0.024	0.601	0.995
Service - Miscellaneous	2843.308	1600.286	48.863	3.12	1.75	0.05	0.080	0.063	1.000
Service - Maintenance	89.256	1615.189	98.520	0.04	0.64	0.04	0.851	0.802	1.000
Service - Other Services	1501.641	13879.091	97.238	0.72	6.67	0.05	0.397	0.000	1.000
Service - Family Members	50.776	14.694	11.803	4.22	1.22	0.98	0.042	0.276	0.471
Service - Number Received	53391.000	71744.569	840.764	2.89	3.88	0.05	0.092	0.000	1.000
Ever in Status 06	113.391	1118.505	25.877	0.31	3.06	0.07	0.578	0.001	1.000
All Services Cost	6663.824	759674.110	8170.979	0.08	8.71	0.09	0.783	0.000	1.000
Facility Cost	38269.795	168709.197	3119.379	0.61	2.70	0.05	0.435	0.003	1.000
Ratio Facility Cost/All Cost	0.001	0.010	0.000	0.02	0.30	0.01	0.898	0.989	1.000
Months to Acceptance	0.700	3.648	1.095	0.06	0.34	0.10	0.800	0.981	1.000
Months in Service Statuses	0.889	15.591	1.414	0.04	0.69	0.06	0.843	0.758	1.000
Total Months in System	5.330	32.338	3.293	0.23	1.38	0.14	0.634	0.182	1.000

[1] Degrees of freedom for each analysis were Gender, 1; Fiscal Year, 12; Gender by Fiscal Year, 12; and Error, 131.

F. Service Provision
Table of Percentages and Averages (Means)

Type FY Gdr	Services: Diagnosis	Services: Restoratn	Services: College	Services: Other Academics	Services: Business School	Services: Vocatnl/ Techncl	Services: On-Job Training	Services: Vocatnl Adjustmnt	Services: Miscellns	Services: Maintence	Services: Other	Services: to Family
Total Mean (n = 156)												
0	90.22	24.28	12.48	3.12	3.02	13.21	4.85	22.19	13.16	21.49	40.18	1.28
Means by Year (n's per Year = 12)												
72	79.03	24.65	11.40	3.80	3.98	11.47	6.00	22.20	9.95	17.88	27.70	1.43
73	90.80	22.58	12.13	3.87	3.67	12.00	6.47	23.10	10.32	20.52	30.58	1.55
74	78.02	24.35	12.40	4.32	3.58	11.07	5.42	23.32	10.75	20.27	32.23	1.67
75	90.28	22.17	12.40	3.82	3.38	11.92	5.58	24.38	11.03	21.63	35.58	1.30
76	90.65	23.53	13.23	4.03	3.02	12.73	4.38	23.38	11.23	22.75	37.02	1.33
77	92.02	23.40	14.83	3.50	3.45	12.92	4.80	23.60	12.70	25.00	40.63	1.03
78	93.73	24.05	13.50	3.17	3.53	13.18	4.88	22.87	14.28	24.62	44.67	0.92
79	93.50	24.88	12.92	2.53	2.90	14.92	4.10	21.85	13.62	24.67	43.83	0.95
80	92.75	25.50	13.47	2.38	2.85	14.95	3.90	20.85	15.32	22.93	45.32	1.25
81	92.75	26.62	11.48	2.73	2.17	13.95	4.32	19.97	14.10	20.40	43.93	1.40
82	92.58	24.58	12.40	2.27	2.90	13.97	4.28	21.40	15.07	19.95	45.87	1.40
83	93.47	24.83	11.68	2.02	2.02	15.08	4.53	20.23	16.78	20.07	47.05	1.25
84	93.35	24.50	10.42	2.17	1.85	13.55	4.43	21.32	15.92	18.72	47.88	1.20
Means by Gender (1 = Men, 2 = Women) (n's per Year = 78)												
Men 1	90.02	22.83	11.75	3.14	1.80	14.05	5.04	21.24	12.30	21.64	40.80	1.17
Women 2	90.42	25.73	13.21	3.11	4.25	12.36	4.67	23.14	14.01	21.34	39.56	1.40
Men by Year (n's per Year = 6)												
72	78.60	22.23	11.57	3.77	2.40	12.83	5.93	21.40	8.77	17.87	27.67	1.63
73	91.04	20.47	12.00	3.80	2.10	13.43	6.67	22.47	9.67	21.73	31.77	1.67
74	78.10	21.83	11.33	4.30	2.20	11.73	5.13	22.13	9.97	20.67	32.40	1.27
75	90.30	21.33	12.10	4.33	2.03	12.33	6.20	23.57	10.77	21.60	35.90	1.03
76	89.37	22.37	12.80	4.33	1.70	14.00	4.50	23.53	10.37	23.37	37.57	1.03
77	91.57	23.43	14.50	2.93	1.90	13.87	5.10	23.90	12.10	25.67	40.60	0.67
78	93.47	22.63	12.57	3.27	1.93	13.40	5.00	22.00	13.63	24.17	45.27	0.83
79	93.43	23.77	12.77	2.60	1.53	15.20	4.07	20.80	12.10	24.17	44.60	0.73
80	92.53	24.40	12.83	2.30	2.10	16.57	3.90	18.87	14.03	23.30	46.33	1.10
81	93.07	25.97	10.30	2.83	1.17	14.90	4.87	17.53	12.63	19.83	43.70	1.40
82	92.37	23.33	10.70	2.20	2.00	14.17	4.73	20.93	14.37	19.60	47.57	1.57
83	93.17	22.87	10.00	1.93	0.93	15.80	4.63	19.03	16.50	20.90	48.07	1.23
84	93.43	22.20	9.33	2.17	1.37	14.43	4.80	19.93	15.07	18.50	48.93	1.03
Women by Year (n's per Year = 6)												
72	79.47	27.07	11.23	3.83	5.57	10.10	6.07	23.00	11.13	17.90	27.73	1.23
73	90.56	24.70	12.27	3.93	5.23	10.57	6.27	23.73	10.97	19.30	29.40	1.43
74	77.93	26.87	13.47	4.33	4.97	10.40	5.70	24.50	11.53	19.87	32.07	2.07
75	90.27	23.00	12.70	3.30	4.73	11.50	4.97	25.20	11.30	21.67	35.27	1.57
76	91.93	24.70	13.67	3.73	4.33	11.47	4.27	23.23	12.10	22.13	36.47	1.63
77	92.47	23.37	15.17	4.07	5.00	11.97	4.50	23.30	13.30	24.33	40.67	1.40
78	94.00	25.47	14.43	3.07	5.13	12.97	4.77	23.73	14.93	25.07	44.07	1.00
79	93.57	26.00	13.07	2.47	4.27	14.63	4.13	22.90	15.13	25.17	43.07	1.17
80	92.97	26.60	14.10	2.47	3.60	13.33	3.90	22.84	16.60	22.57	44.30	1.40
81	92.43	27.27	12.67	2.63	3.17	13.00	3.77	22.40	15.57	20.97	44.17	1.40
82	92.80	25.83	14.10	2.33	3.80	13.77	3.83	21.87	15.77	20.30	44.17	1.23
83	93.77	26.80	13.37	2.10	3.10	14.37	4.43	21.43	17.07	19.23	46.03	1.27
84	93.27	26.80	11.50	2.17	2.33	12.67	4.07	22.70	16.77	18.93	46.83	1.37

F. Service Provision
Table of Percentages and Averages (Means) (Continued)

Type FY Gndr	Average Number of Services	Costs: Totals	Costs: Facility	Costs: Facility Proportion	Ever in Status 06	Months: Statuses 02-08	Months: Statuses 02-10	Months: Statuses 10 to Closure	Months: Total
Total Means (n = 156)									
0	2.48	1098.79	385.92	0.253	2.94	0.00	5.55	20.30	25.86
Means by Year (n's per Year = 12)									
72	2.19	736.83	250.67	0.252	0.00	0.00	5.49	20.06	25.09
73	2.22	747.40	246.84	0.262	0.00	0.00	5.39	20.02	23.28
74	2.27	745.85	254.97	0.266	0.00	0.00	4.38	18.32	22.12
75	2.44	818.56	266.81	0.270	1.88	0.00	4.92	19.41	26.93
76	2.47	981.09	267.49	0.205	2.22	0.00	5.10	20.60	26.45
77	2.58	1167.03	334.23	0.206	3.07	0.00	6.01	22.45	27.70
78	2.63	1263.62	377.64	0.213	3.82	0.00	5.89	21.58	26.89
79	2.61	1304.94	501.68	0.261	4.03	0.00	6.41	21.23	26.41
80	2.62	1349.02	481.75	0.254	4.35	0.00	5.88	21.31	27.89
81	2.54	1311.08	505.00	0.258	4.52	0.00	6.04	18.97	26.11
82	2.57	1293.71	511.63	0.263	4.42	0.00	5.98	19.45	26.23
83	2.59	1301.07	513.89	0.289	4.75	0.00	5.35	20.35	25.92
84	2.55	1264.06	504.37	0.293	5.23	0.00	5.35	20.17	25.14
Means by Gender (1 = Men, 2 = Women) (n's per Year = 78)									
Men	2.45	1092.25	370.26	0.251	3.12	0.00	5.49	20.23	25.68
Women	2.52	1105.33	401.58	0.255	2.77	0.00	5.62	20.38	26.05
Men by Year (n's per Year = 6)									
72	2.15	760.61	216.77	0.244	0.00	0.00	5.01	19.99	25.64
73	2.22	730.23	228.64	0.268	0.00	0.00	5.51	19.66	22.66
74	2.21	726.42	252.78	0.262	0.00	0.00	4.87	17.97	21.97
75	2.42	801.26	244.17	0.266	1.77	0.00	4.50	19.58	26.69
76	2.45	994.87	253.80	0.207	2.53	0.00	5.23	20.67	26.79
77	2.56	1187.54	326.08	0.208	3.20	0.00	5.50	22.50	26.64
78	2.58	1286.78	365.74	0.211	3.83	0.00	5.62	21.68	27.48
79	2.56	1313.36	495.86	0.255	3.93	0.00	6.24	21.69	26.35
80	2.58	1358.87	464.98	0.248	4.33	0.00	5.99	21.51	27.99
81	2.48	1265.86	448.80	0.249	4.57	0.00	6.20	19.13	26.25
82	2.54	1264.65	510.20	0.265	5.00	0.00	6.21	18.79	25.69
83	2.55	1299.39	520.93	0.296	5.33	0.00	5.22	19.68	25.09
84	2.51	1209.46	484.61	0.289	6.00	0.00	5.21	20.10	24.53
Women by Year (n's per Year = 6)									
72	2.24	713.04	284.57	0.260	0.00	0.00	5.96	20.13	24.55
73	2.23	764.57	265.03	0.256	0.00	0.00	5.26	20.38	23.90
74	2.34	765.28	257.16	0.270	0.00	0.00	3.89	18.68	22.27
75	2.46	835.87	289.46	0.274	2.00	0.00	5.35	19.25	27.18
76	2.50	967.31	281.19	0.204	1.90	0.00	4.98	20.52	26.12
77	2.60	1146.52	342.37	0.203	2.93	0.00	6.51	22.40	28.77
78	2.69	1240.46	389.55	0.215	3.80	0.00	6.16	21.48	26.30
79	2.66	1296.52	507.50	0.267	4.13	0.00	6.58	20.77	26.48
80	2.65	1339.17	498.52	0.260	4.37	0.00	4.65	21.11	28.02
81	2.59	1356.30	561.19	0.268	4.47	0.00	5.87	18.80	25.97
82	2.60	1322.77	513.05	0.262	3.83	0.00	5.76	20.12	26.78
83	2.63	1302.76	506.86	0.282	4.17	0.00	5.48	21.03	26.74
84	2.59	1318.67	524.13	0.297	4.47	0.00	5.48	20.24	25.74

G. Outcomes and Impacts
Analyses of Variance [1]

	MEAN SQUARES			F-RATIOS			P-LEVELS		
Descriptions of Variables	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)	Gender (A)	Fiscal Year (B)	(A x B)
Successfully Rehabilitated	17706.692	14371.127	188.706	11.43	9.28	0.12	0.001	0.000	1.000
Unsuccessfull - Served	5834.077	8360.724	115.244	6.43	9.21	0.13	0.012	0.000	1.000
Unsuccessfull - Not Served	3213.231	914.828	73.939	5.35	1.52	0.12	0.022	0.123	1.000
Rehab. Outcome-Competitive	61523.103	11640.215	707.755	81.39	15.40	0.94	0.000	0.000	0.513
Rehab. Outcome-Sheltered	1787.077	276.119	19.619	5.97	0.92	0.07	0.016	0.526	1.000
Rehab. Outcome-Self Emp/BEP	403.853	19.034	7.075	7.67	0.36	0.13	0.006	0.974	1.000
Rehab. Outcome-Homeworker	130385.256	782.606	614.048	278.59	1.67	1.31	0.000	0.080	0.219
Rehab. Outcome-Not Working	194.077	12243.939	60.841	0.81	50.82	0.25	0.371	0.000	0.995
Rehab. Outcome-Other, Unknown	11407.410	72670.200	340.757	8.00	50.98	0.24	0.005	0.000	0.996
Reason Not Reh.-Cant Locate	2440.314	869.675	21.425	17.90	6.38	0.16	0.000	0.000	1.000
Reason Not Reh.-Too Severe	191.853	73.097	20.894	1.89	0.72	0.21	0.172	0.732	0.998
Reason Not Reh.-Refused	1495.442	4377.422	149.928	2.92	8.54	0.29	0.090	0.000	0.990
Reason Not Reh.-Death	142.314	8.103	6.925	23.85	1.36	1.16	0.000	0.195	0.318
Reason Not Reh.-Institutional	882.314	13.460	6.300	112.21	1.71	0.80	0.000	0.071	0.649
Reason Not Reh.-Transferred	1.256	10.609	2.923	0.14	1.22	0.34	0.705	0.278	0.981
Reason Not Reh.-Other	1.083	177.072	1.486	0.09	14.20	0.12	0.769	0.000	1.000
Occupation - Prof,Tech,Manag	15261.853	15957.771	269.741	10.44	10.91	0.18	0.002	0.000	0.999
Occupation - Clerical,Sales	57461.769	442.141	89.214	643.39	4.95	1.00	0.000	0.000	0.454
Occupation - Service	18986.160	1072.706	213.146	82.16	4.64	0.92	0.000	0.000	0.527
Occupation - Agri/Fish/Forest	3510.256	14.951	11.534	209.46	0.89	0.69	0.000	0.557	0.760
Occupation - Processing	86433.231	821.200	280.189	187.90	1.79	0.61	0.000	0.057	0.831
Occupation - Machine	17031.410	167.591	54.757	105.54	1.04	0.34	0.000	0.418	0.980
Occupation - Structural	41682.692	210.974	171.748	1268.04	6.42	5.22	0.000	0.000	0.000
Occupation - Miscellaneous	26572.410	285.917	177.382	596.86	6.42	3.98	0.000	0.000	0.000
Referral Income - Unadjusted	709835.796	395997.455	40260.528	3.92	2.19	0.22	0.050	0.016	0.997
Referral Income - Adj/Poverty	323891.581	152651.536	67578.778	1.46	69.00	0.31	0.229	0.000	0.972
Closure Income - Unadjusted	2183865.125	256315.513	83595.199	220.90	25.93	0.85	0.000	0.000	0.604
Closure Income - Adj/Poverty	1628935.514	513873.413	523852.505	122.70	3.87	0.39	0.000	0.000	0.935
Pub. Assist. at Referral	56620.410	1997.710	505.035	62.30	2.20	0.56	0.000	0.015	0.874
Pub. Assist. at Closure	52653.564	2479.771	381.897	66.69	3.14	0.48	0.000	0.001	0.921

[1] Degrees of freedom for each analysis were Gender, 1; Fiscal Year, 12; Gender by Fiscal Year, 12; and Error, 131.

G. Outcomes and Impacts
Table of Percentages and Averages (Means)

Type FY Gndr	Public Assistance: Referral	Public Assistance: Closure	DOT at Closure: Professn	DOT at Closure: Clerical	DOT at Closure: Services	DOT at Closure: Processng	DOT at Closure: Machine	DOT at Closure: Structrl	DOT at Closure: Miscelleous	Closure Status: 26	Closure Status: 28	Closure Status: 30
Total Means (n = 156)												
0	21.29	15.66	43.51	10.78	13.09	10.37	7.49	3.85	4.37	65.29	24.29	10.43
Means by Year (n's per Year = 12)												
72	14.13	8.67	30.13	12.73	16.25	14.13	6.23	4.88	5.82	78.80	13.67	7.53
73	18.13	11.45	31.27	11.93	16.75	12.88	7.12	5.32	5.92	76.57	16.43	7.00
74	23.40	13.62	32.82	11.98	15.68	11.90	7.40	5.22	5.92	74.33	17.40	8.27
75	21.82	17.08	43.13	10.85	13.10	10.70	7.28	3.73	4.43	65.90	23.85	10.25
76	23.33	18.08	52.53	8.47	11.10	8.65	6.47	3.43	3.60	56.38	31.62	12.00
77	23.82	17.97	48.32	10.42	11.52	8.92	7.03	3.90	4.45	60.93	28.48	10.58
78	22.07	16.33	45.87	10.45	12.47	9.60	7.15	4.12	4.27	63.42	25.65	10.93
79	22.15	16.65	44.93	11.30	12.30	9.12	7.40	3.98	4.38	63.85	25.43	10.72
80	21.45	17.35	46.38	11.57	11.43	9.32	8.03	3.52	4.42	64.12	24.92	10.97
81	20.75	17.62	46.20	11.37	11.93	10.25	8.18	3.18	3.57	62.32	25.52	12.17
82	21.52	17.00	49.88	9.37	12.15	9.20	8.03	2.83	3.15	58.90	28.72	12.38
83	22.57	17.47	47.95	9.33	12.95	10.20	8.08	3.07	3.53	60.92	27.83	11.25
84	21.60	14.25	46.17	10.37	12.48	9.97	8.95	2.92	3.32	62.30	26.22	11.48
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)												
Men	17.48	11.98	45.48	6.94	10.88	5.66	9.58	7.12	6.98	63.16	25.51	11.33
Women	25.10	19.33	41.53	14.62	15.29	15.08	5.40	0.58	1.76	67.42	23.06	9.52
Men by Year (n's per Year = 6)												
72	12.63	6.47	33.23	8.00	12.43	7.37	8.50	9.50	9.77	75.90	15.07	9.03
73	15.00	7.43	33.37	7.83	13.20	6.63	9.90	9.87	9.53	74.67	17.50	7.83
74	18.13	8.57	34.77	7.37	12.57	6.67	10.07	9.60	9.77	72.47	18.07	9.47
75	17.10	12.03	45.40	6.93	10.70	5.97	9.67	6.73	7.17	63.13	26.00	10.87
76	17.90	13.03	54.20	5.33	9.07	4.27	8.27	6.33	6.10	53.77	33.37	12.87
77	19.33	13.73	48.27	7.07	10.00	4.87	9.27	7.00	7.03	60.33	28.60	11.07
78	17.67	11.97	46.93	6.17	10.10	5.80	9.27	7.50	7.00	62.23	26.37	11.40
79	17.73	12.63	46.60	7.43	10.07	5.83	9.50	7.20	6.47	62.47	26.60	10.93
80	17.20	14.00	48.33	7.43	9.77	5.13	10.23	6.43	6.73	62.27	26.20	11.53
81	17.17	14.93	50.20	7.60	10.03	5.03	9.70	5.97	5.50	58.80	27.67	13.53
82	17.87	14.10	52.10	6.43	10.80	5.03	9.43	5.40	4.60	56.67	29.20	14.13
83	21.47	15.93	50.10	5.97	11.27	5.47	9.60	5.67	5.60	58.17	29.10	12.73
84	18.00	10.93	47.80	6.67	11.43	5.57	11.13	5.40	5.43	60.17	27.90	11.93
Women by Year (n's per Year = 6)												
72	15.63	10.87	27.03	17.47	20.07	20.90	3.97	0.27	1.87	81.70	12.27	6.03
73	21.27	15.47	29.17	16.03	20.30	19.13	4.33	0.77	2.30	78.47	15.37	6.17
74	28.67	18.67	30.87	16.60	18.80	17.13	4.73	0.83	2.07	76.20	16.73	7.07
75	26.53	22.13	40.87	14.77	15.50	15.43	4.90	0.73	1.70	68.67	21.70	9.63
76	28.77	23.13	50.87	11.60	13.13	13.03	4.67	0.53	1.10	59.00	29.87	11.13
77	28.30	22.20	48.37	13.77	13.03	12.97	4.80	0.80	1.87	61.53	28.37	10.10
78	26.47	20.70	44.80	14.73	14.83	13.40	5.03	0.73	1.53	64.60	24.93	10.47
79	26.57	20.67	43.27	15.17	14.53	12.40	5.30	0.77	2.30	65.23	24.27	10.50
80	25.70	20.70	44.43	15.70	13.10	13.50	5.83	0.60	2.10	65.97	23.63	10.40
81	24.33	20.30	42.20	15.13	13.83	15.47	6.67	0.40	1.63	65.83	23.37	10.80
82	25.17	19.90	47.67	12.30	13.50	13.37	6.63	0.27	1.70	61.13	28.23	10.63
83	23.67	19.00	45.80	12.70	14.63	14.93	6.57	0.47	1.47	63.67	26.57	9.77
84	25.20	17.57	44.53	14.07	13.53	14.37	6.77	0.43	1.20	64.43	24.53	11.03

G. Outcomes and Impacts

Table of Percentages and Averages (Means) (Continued)

Type FY Gdr	Not Rehab: Not Locate	Not Rehab: Hard to Serve	Not Rehab: Refused Service	Not Rehab: Death	Not Rehab: Institu-tionalized	Not Rehab: Transferrd Another	Not Rehab: Other
Total Means (n = 156)							
0	8.52	3.98	13.49	1.01	0.97	0.43	0.40
Means by Year (n's per Year = 12)							
72	6.02	3.57	6.88	1.37	0.97	0.18	1.28
73	7.02	3.43	7.03	1.08	0.88	0.18	1.92
74	8.08	3.37	8.63	1.05	1.07	0.25	1.95
75	10.18	4.07	11.70	1.15	1.45	0.42	0.00
76	12.15	4.78	17.08	1.03	1.27	0.43	0.00
77	10.15	3.90	15.25	1.08	1.02	0.50	0.00
78	9.67	4.20	13.27	1.12	1.05	0.45	0.00
79	8.87	3.97	13.70	0.75	0.92	0.38	0.00
80	7.45	4.23	15.00	0.92	0.73	0.43	0.00
81	7.72	4.80	15.23	0.97	0.82	0.52	0.00
82	9.20	4.38	17.17	0.82	0.73	0.45	0.00
83	7.35	3.75	17.70	0.82	0.98	0.47	0.00
84	6.97	3.33	16.70	1.00	0.73	0.93	0.00
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)							
Men	9.31	4.21	14.11	1.20	1.45	0.45	0.41
Women	7.73	3.76	12.87	0.82	0.49	0.41	0.38
Men by Year (n's per Year = 6)							
72	7.07	3.97	7.70	1.57	1.30	0.17	1.53
73	7.93	4.07	7.10	1.20	1.43	0.23	1.90
74	8.83	3.50	8.70	1.57	1.53	0.33	1.93
75	11.43	4.47	12.13	1.53	2.30	0.47	0.00
76	12.97	5.17	18.27	1.30	1.63	0.53	0.00
77	10.57	3.87	15.40	1.17	1.53	0.43	0.00
78	10.47	4.07	13.13	1.37	1.57	0.37	0.00
79	9.80	4.50	13.73	0.80	1.37	0.33	0.00
80	7.97	4.57	15.20	1.17	1.27	0.47	0.00
81	8.77	5.03	16.63	1.20	1.33	0.53	0.00
82	10.07	4.53	17.40	0.83	1.13	0.40	0.00
83	7.93	3.47	19.77	0.97	1.43	0.37	0.00
84	7.30	3.47	18.23	0.97	0.97	1.20	0.00
Women by Year (n's per Year = 6)							
72	4.97	3.17	6.07	1.17	0.63	0.20	1.03
73	6.10	2.80	6.97	0.97	0.33	0.13	1.93
74	7.33	3.23	8.57	0.53	0.60	0.17	1.97
75	8.93	3.67	11.27	0.77	0.60	0.37	0.00
76	11.33	4.40	15.90	0.77	0.90	0.33	0.00
77	9.73	3.93	15.10	1.00	0.50	0.57	0.00
78	8.87	4.33	13.40	0.87	0.53	0.53	0.00
79	7.93	3.43	13.67	0.70	0.47	0.43	0.00
80	6.93	3.90	14.80	0.67	0.20	0.40	0.00
81	6.67	4.57	13.83	0.73	0.30	0.50	0.00
82	8.33	4.23	16.93	0.80	0.33	0.50	0.00
83	6.77	4.03	15.63	0.67	0.53	0.57	0.00
84	6.63	3.20	15.17	1.03	0.50	0.67	0.00

G. Outcomes and Impacts
Table of Percentages and Averages (Means) (Continued)

Type FY Gndr	Outcome: Competitive	Outcome: Sheltered	Outcome: Self/BEP	Outcome: Homemaker	Outcome: Not Working	Outcome: Other	Earnings at Entry: Unadjusted	Earnings at Exit: Unadjusted	Earnings at Entry: Adjusted	Earnings at Exit: Adjusted
Total Means (n = 156)										
0	48.52	5.59	2.17	9.06	3.33	30.00	1326.08	6013.00	-4049.29	246.70
Means by Year (n's per Year = 12)										
72	58.17	5.68	2.37	12.93	11.88	2.63	1021.30	3599.83	0.00	0.00
73	58.72	4.87	2.30	11.15	15.00	3.83	1108.98	3759.57	0.00	0.00
74	57.83	5.10	2.00	10.17	16.35	2.63	1122.90	4047.99	0.00	0.00
75	49.32	5.08	2.27	9.23	0.00	34.10	1261.31	5358.99	-2637.58	521.62
76	41.15	4.60	2.10	7.92	0.00	43.62	1226.75	5351.42	-2985.88	352.90
77	46.28	4.82	2.23	7.52	0.00	39.07	1366.85	6121.19	-3159.38	730.67
78	49.30	4.27	2.30	7.52	0.00	36.58	1307.35	6623.36	-3413.42	995.79
79	49.27	5.37	1.87	7.30	0.00	36.15	1348.45	6860.00	-3663.76	795.08
80	48.12	5.62	2.37	7.98	0.00	35.88	1576.71	7407.47	-3800.47	648.52
81	43.83	6.67	2.50	9.30	0.00	37.68	1584.32	7495.14	-4320.11	143.29
82	41.43	6.47	2.30	8.65	0.00	41.10	1409.59	7383.84	-5007.31	-464.96
83	42.92	6.65	1.97	9.30	0.00	39.08	1574.32	7592.05	-5502.05	-496.58
84	44.40	7.48	1.58	8.80	0.00	37.70	1330.24	6994.97	-6002.90	-1109.23
Means by Gender (1 = Men, 2 = Women) (n's per Gender = 78)										
Men	52.49	4.91	2.49	3.28	3.55	31.71	1393.54	7211.64	-4101.24	1431.71
Women	44.55	6.27	1.84	14.84	3.10	28.30	1258.63	4814.35	-3997.33	-938.32
Men by Year (n's per Year = 6)										
72	64.63	4.83	2.80	4.03	12.97	2.87	1170.61	4375.94	0.00	0.00
73	65.43	3.90	2.37	3.13	16.27	4.13	1194.60	4591.87	0.00	0.00
74	63.93	4.07	2.10	2.87	16.90	3.30	1171.33	4943.98	0.00	0.00
75	53.30	4.53	2.47	2.83	0.00	36.87	1312.55	6492.47	-2632.01	1522.62
76	44.10	3.90	2.33	2.93	0.00	46.23	1249.70	6400.78	-3070.92	1256.64
77	50.20	4.63	2.63	2.77	0.00	39.67	1461.58	7259.98	-3190.00	1705.74
78	53.63	3.47	2.80	2.30	0.00	37.77	1371.26	7894.78	-3390.11	2161.44
79	52.63	4.97	2.17	2.67	0.00	37.53	1359.35	8131.02	-3725.24	1986.35
80	51.27	4.83	2.70	3.43	0.00	37.73	1701.95	8790.79	-3734.52	1897.81
81	46.13	6.00	3.00	3.63	0.00	41.20	1628.80	9125.01	-4444.18	1597.11
82	44.43	5.57	2.73	3.87	0.00	43.33	1388.29	8945.52	-5082.53	1035.45
83	45.00	6.33	2.47	4.23	0.00	41.83	1754.77	8886.46	-5545.39	524.83
84	47.67	6.83	1.77	3.90	0.00	39.83	1351.22	8387.95	-6197.52	287.21
Women by Year (n's per Year = 6)										
72	51.70	6.53	1.93	21.83	10.80	2.40	871.99	2823.71	0.00	0.00
73	52.00	5.83	2.23	19.17	13.73	3.53	1023.37	2927.26	0.00	0.00
74	51.73	6.13	1.90	17.47	15.80	1.97	1074.47	3152.00	0.00	0.00
75	45.33	5.63	2.07	15.63	0.00	31.33	1210.08	4225.51	-2643.15	-479.37
76	38.20	5.30	1.87	12.90	0.00	41.00	1203.79	4302.06	-2900.85	-550.83
77	42.37	5.00	1.83	12.27	0.00	38.47	1272.12	4982.40	-3128.75	-244.40
78	44.97	5.07	1.80	12.73	0.00	35.40	1243.45	5351.94	-3436.74	-169.86
79	45.90	5.77	1.57	11.93	0.00	34.77	1337.56	5588.98	-3602.27	-396.19
80	44.97	6.40	2.03	12.53	0.00	34.03	1636.65	6027.87	-3708.15	-607.99
81	41.53	7.33	2.00	14.97	0.00	34.17	1539.83	5865.26	-4196.05	-1310.52
82	38.43	7.37	1.87	13.43	0.00	38.87	1430.88	5822.16	-4932.10	-1965.37
83	40.83	6.97	1.47	14.37	0.00	36.33	1393.88	6297.64	-5458.72	-1517.99
84	41.13	8.13	1.40	13.70	0.00	35.57	1309.27	5601.99	-5808.29	-2505.67

H. R-300 Data Form

Card Number 1

Col.	Content
1	Card Number (1 = Card Number 1)
2-3	Agency Code (12 = Illinois; 13 = Indiana ; 21 = Michigan; 22 = Minnesota; 34 = Ohio; 49 = Wisconsin; 71 = Michigan Blind; 72 = Minessota Blind)
4-13	Case Number
14-16	County Code (Enter the three digit code from the code list provided by your agency.)
17-21	Zip Code
22-25	Referral Date (First two digits for month as 01 = January; 02 = February; 03 = March; 04 = April; 05 = May; 06 = June; 07 = July; 08 = August; 09 = September; 10 = October; 11 = November; 12 = December. Last two digits for year.)
26-27	Referral Source (Please see attached)
28-29	Age at Referral
30	Sex (1 = Male; 2 = Female)
31-33	Disability as Reported (See R-300 Manual)
34-42	Social Security Number
43-44	SSDI/SSI at Referral (0 = Not an applicant; 1 = Applicant - Allowed benefits; 2 = Applicant - Denied benefits; 3 = Applicant - Status of application pending; 4 = Not known if an applicant; 5 = Benefits discontinued or terminated;
45	Race (1 = White; 2 = Negro; 3 = Indian; 4 = Other; Y = Not available)
46-47	Months in 00-02

48	Spanish Surname (1 = Yes, of Spanish origin; 2 = No, not of Spanish origin)
49	Reasons Not Accepted (1 = Unable to locate or contact; or moved; 2 = Handicapped too severe or unfavorable medical prognosis; 3 = Refused services or further services; 4 = Death; 5 = client institutionalized; 6 = Transfer to another agency; 7 = Failure to cooperate; 8 = No disabling condition; 9 = No vocational handicap; Y = Other)
50	Outcome (Ref.) (1 = Not Accepted from (00); 2 = Not Accepted from (02); 4 = Accepted for Extended Evaluation (06); 5 = Accepted for VR Services (10))
51-53	Disabling Condition - Major (See R300 Manual)
54-56	- Secondary (See R300 Manual)
57	Previous Closure - Outcome (1 = No; 2 = Yes, Rehab; 3 = Yes, Not Rehab.)
58-59	- Months Since Previous Closure
60	At Referral - Marital Status (1 = Married; 2 = Widowed; 3 = Divorced; 4 = Separated; 5 = Never Married; 6 = Not Available)
61	- Number of Dependents
62	- Number in Family
63-64	- Highest Grade Completed
65	- Work Status (1 = Wage or salaried worker - competitive labor market; 2 = Wage or salaried worker - sheltered workship; 3 = Self-employed (except BEP); 4 = State-agency-managed business enterprise (BEP); 5 = Homemaker; 6 = Unpaid family worker; 7 = Student; 8 = Other; Y = Not available)
66-68	- Weekly Earnings (Dollars)

69 - Family Income
(0 = $ 0.00 - 149.99
1 = $150.00 - 199.99
2 = $200.00 - 249.99
3 = $250.00 - 299.99
4 = $300.00 - 249.99
5 = $350.00 - 399.99
6 = $400.00 - 449.99
7 = $450.00 - 499.99
8 = $500.00 - 599.99
9 = $600.00 and over
Y = Not Available)

70 - Public Assistance Type
(0 = None [Do not use at closure if client received public assistance between referral and closure [see Code 9]];
1 = SSI-aged;
2 = SSI-blind;
3 = SSI-disabled;
4 = Aid to Families with Dependent Children [AFDC];
5 = General Assistance, only;
6 = AFDC and SSI in combination;
7 = [Do not use];
8 = Type(s) not known;
9 = PA received between referral and closure only. [Do not use in Part 2, Item R. Record dollar amount of first check.]
Y = Not available. [Do not use in Part 2, Item R, if accepted for extended evaluation or VR services. Do not use in Part 3, Item K, if closed in Status 26.])

71-73 - Public Assistance Monthly Amount (Dollars)

74 - Public Assistance Time on
(0 = Not receiving Public Assistance
1 = Less than six months
2 = Six months but less than one year
3 = One year but less than two
4 = Two years but less than three
5 = Three years but less than four
6 = Four years but less than five
7 = Five years or more
Y = Not available)

75-76 - Source of Support
(00 = Current earnings, interest, dividends, rent
01 = Family and friends
02 = Private relief agency
03 = Public assistance, at least partly with Federal funds
04 = Public assistance, without Federal funds [GA only]
05 = Public institution - tax supported
06 = Workmen's compensation
07 = Social Security Disability Insurance benefits
08 = All other public sources
09 = Annuity or other non-disabilty insurance benefits [private]
10 = All other sources of support
YY = Not available)

77-78 - Type of Institution
(00 = Not in institution at referral
01 = Public mental hospital
02 = Private mental hospital
03 = Psychiatric impatient unit of general hospital
04 = Community mental health center - inpatient
05 = Public institution for the mentally retarded
06 = Private institution for the mentally retarded
07 = Alcoholism treatment center
08 = Drug abuse treatment center
09 = School and other institution for the blind
10 = School and other institution for the deaf
11 = General hospital
12 = Hospital or specialized facility for chronic illness
13 = Institution for the aged
14 = Halfway house
15 = Correctional institution - adult
16 = Correctional institution - juvenile
17 = Other institutions and living arrangements)

Card Number 2

Col.	Content
1	Card Number (2 = Card Number 2)
2-3	Agency Code (12 = Illinois; 13 = Indiana ; 21 = Michigan; 22 = Minnesota; 34 = Ohio; 49 = Wisconsin; 71 = Michigan Blind; 72 = Minessota Blind)
4-13	Case Number
14-17	Date of Closure (First two digits for month as 01 = January; 02 = February; 03 = March; 04 = April; 05 = May; 06 = June; 07 = July; 08 = August; 09 = September; 10 = October; 11 = November; 12 = December. Last two digits for year.)
18	SSA Referral (1 = No, not referred by Social Security; 2 = Yes, initially refereed by Social Security)
19	SSA Claim Type (1 = DIB 2 = CDB-OA 3 = CDB-DI 4 = DWB 9 = No Trust Funds expenditures)
20-22	Federal Special Program Identification (000 = None; 001 = Social Security Trust Funds; 002 = Veterans; 010 = Migratory Agricultural Workers 020 = Public Offender 040 = Work Incentive Program 100 = Expansion Grant Project 200 = Supplemental Security Income Funds 400 = Severely Disabled
23-27	Cost of Case Services (Dollars) - All Services Total
28-32	- Rehab. Facilities Total
33-37	- Social Security Trust Funds Total
38-42	- Supp. Security Income Funds Total

43	At Closure - SSDI Status (See Field 43-44, Record 1)
44	- SSI Status (See Field 43-44, Record 1)
45	- Work Status
46-48	- Weekly Earning (Dollars)
49	- Public Assistance Type
50-52	- Public Assistance Monthly Amount (Dollars)
53-56	- Occupation (From Dictionary of Occupational Titles)
57-58	Months Spent in Status 06
59-60	10-24
61-62	18
63-64	20-22
65	Outcome (EE/VR) (1 = Closed for extended evaluation [Status 08]; 2 = Closed rehabilitated [Status 26]; 3 = Closed not rehabilitated [Status 28]; 4 = Closed not rehabilitated [Status 30])
66	Reasons Not Rehabilitated (1 = Unable to locate or contact; or moved; 2 = Handicapped too severe or unfavorable medical prognosis; 3 = Refused services or further services; 4 = Death; 5 = client institutionalized; 6 = Transfer to another agency; 7 = Failure to cooperate; Y = Other)
67	Services Provided (0 = No Service; 1 = Service with cost to agency; 2 = Service without cost to agency; 3 = Service with and without cost to agency) - Diagnostic
68	- Restoration
69	- Training - College
70	- Training - Other Acad.
71	- Training - Business
72	- Training - Voc. School
73	- Training - One-the-job
74	- Training - Adjust.
75	- Training - Miscellaneous
76	- Maintenance
77	- Other
78	- Family Member

I. Glossary

Applicants	Applicants in this research include all individuals who registered with the state rehabilitation agency for potential eligibility for services (i.e., status 00-02). State practices were not consistent in use "referral" or "applicant" statuses.
Clients	See Individuals.
Disabled	See Persons with Disabilities.
Fiscal Year	Federal fiscal year (or FY), not state fiscal years. Fiscal year in the design was the year in which sampled individuals either registered for rehabilitation services or, most typically, were closed rehabilitated or not rehabilitated. In 1980 there was a change in the federal fiscal year from July 1 - June 30 to October 1 - September 30. This caused a transition period in which one fiscal year actually had 15 months, rather than 12 months.
Gender	Common demographic notation used to refer to men and women in the population.
Individuals	Men and women actually accepted for vocational rehabilitation services by their state agency (General, Combined or Blind Agency). Individual is generally used in place of client in this report.
Persons with Disabilities	Term used to describe applicants and individuals served by the vocational rehabilitation program for whom there has been a diagnosis indicating a physical, cognitive, or psychological impairment which limits their vocational or social interactions.
Registrants	See Applicants.
Rehabilitation Programs	The vocational rehabilitation programs provided through state vocational rehabilitation agencies. In Region V, there are six state vocational rehabilitation programs offered through eight General, Combined and Blind Agencies. When the substance of vocational rehabilitation is indicated "program" is used. When referring to the administrative unit responsible for rehabilitation, "agency" is used.
Severity Disability	Severity of disability corresponds to the federal policy of classification of persons with disabilities which the state rehabilitation programs were mandated to give priority to in their services during the various years.

State Agencies	The eight state agencies responsible for providing vocational rehabilitation programs in the six states of Region V. At the time of the study there were four states with Combined Agencies and two states with both General and Blind Agencies. When reference is made to the administrative unit for vocational rehabilitation, "agency" is used, otherwise "program" is used when the substance or processes of rehabilitation are involved.

J. Gender Equity Timeline

The state-federal vocational rehabilitation program is vulnerable to external events, ranging from government intervention to changes in population demographics to economic disturbances. Some events may have localized impact, while others may have national implications and repercussions. The following is a brief, and admittedly incomplete, list of events that occurred during the period of time covered by the research. To some extent, it is reasonable to believe that some of the fluctuations evident in this longitudinal view of vocational rehabilitation in the midwestern states of Region V were influenced by these events.

1972 Vocational Education mandate to serve population with disabilities.

Major lay-off occurs in U.S. Steel and other companies dependent on steel.

Title IX of the Education Amendments of 1972 passed, prohibiting discrimination because of "race, color, religion, sex, or national origin" in higher education, professional schools, and vocational education.

The Equal Employment Opportunity Act of 1972 amending Title VII of the Civil Rights Act of 1964 passed, prohibiting discrimination in employment in federal, state, and local government and in the private sector on the basis of race, color, religion, sex, or national origin. It applies to all private employers of 15 or more people.

The Senate passed the Equal Rights Amendment. The amendment, however, fell short of the 38 state ratification needed to become law.

Courts began using Equal Protection analysis to protect people with disabilities.

1973 Oil embargo occurs.

Major inflationary trend in economy

Rehabilitation Act of 1973 is passed with Section 504 mandating that vocational rehabilitation programs serve population with severe disabilities.

1975 Education For All Handicapped Children Act is passed.

Federal fiscal year is changed from July-June to October-September.

1976 In *Craig v Boren*, the U.S. Supreme Court overturned a statute, holding that mere "administrative convenience" was not sufficient justification for gender-based discrimination.

Title II of the Education Amendments of 1976 passed, creating in each state the full-time position of sex-equity coordinator and requiring each state that receives federal vocational education funds to provide policies to eliminate sex bias.

1978 The Pregnancy Disability Amendments to the 1964 Civil Rights Act passed, making it illegal to refuse to hire or promote a worker because she is pregnant.

1979 Michigan Bureau of Rehabilitation Study comparing client characteristics of men and women is conducted.

1980 Social Security Amendments, 1619 A and B are passed.

National Rehabilitation Association establishes Task Force on Women's Issues in Rehabilitation.

Michigan Rehabilitation Association conducts study of gender-bias in rehabilitation of women.

1982 Mary E. Switzer Memorial Seminar chooses Women in Rehabilitation as its topic.

Region V Council of State Administrators of Vocational Rehabilitation approved development of longitudinal study of services to women and committed support to this interstate project.

Wisconsin Division of Vocational Rehabilitation established its Women's Initiative Project.